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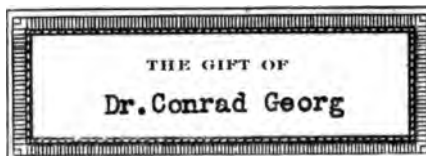
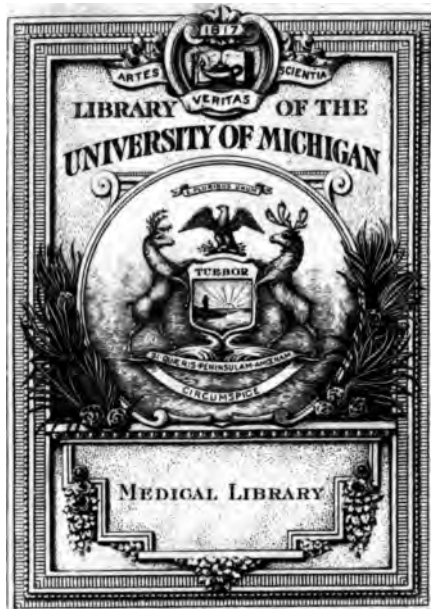
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Medical and Surgical Journal.



EDITED BY JULIUS F. MINER, M. D.

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Physician to Buffalo Hospital of the Sisters of Charity, etc., etc.

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Original Communications.

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ART. I.—*Popliteal Aneurism. Ligature to external femoral without beneficial result. Tumor exposed, contents evacuated and vessels ligated. Cure of Aneurism and recovery without any unpleasant symptoms.* By PROF. JULIUS F. MINER, M. D.

Aneurism has for a long time received the attention of surgeons until it might seem that the most desirable plans of procedure would long since have been fully determined. Undoubtedly in most cases the best method of treatment is well established, but exceptions to general rules (if there can really be said to be any rules in surgery,) are so common as to justify a recital of successful methods, whether falling under established usages or not.

Wm. Kraengel, aged 27, sent for me in the early morning of August 25, with instructions that I come prepared to amputate his thigh, as he had pain too great for longer endurance. On arrival I found a resolute young man, suffering unbearable pain in the popliteal space, extending up to the thigh and through the hip joint. He had been recently a patient at Buffalo General Hospital, where he had been operated upon for popliteal aneurism. The external femoral artery had been ligated with temporary relief of pain, relief of pulsation, but not removal or diminution of

size of tumor. Absence of pulsation, and of the bruit of aneurism made it impossible to determine whether suppurative action in the sac was the cause of pain, tenderness and tumor, or what seemed probable, that the aneurism was supplied at least from the anastomosing branches of the femoral, that when the external femoral was closed, the deep femoral enlarged to meet the requirements of the circulation and that thus the operation of ligaturing the external femoral, though temporarily affording some relief, did not permanently relieve the pressure upon the nerves of the part or diminish the size of the aneurismal tumor. It was decided to open down upon the tumor, determine as far as possible its character, and to act according to indications. An incision nine or ten inches in length fully exposed the tumor and showed its nature; the sac was of dark venous color, did not seem to pulsate when grasped by the hand, but in trying to raise it from its bed and separate it from the surrounding tissues, the fingers passed suddenly into the back part of the sac, which was softened to such an extent as to offer little resistance. The aneurismal coagulum was firmer than the walls of the sac; this was turned out of its bed and the fingers passed up to the opening of the vessels in the sac, thus controlling hemorrhage until a ligature could be passed around the vessels supplying the tumor. Hemorrhage, though at first profuse, was soon controlled, the sac emptied of coagulum, vessels ligated a few inches above the sac and one vessel from return circulation below the sac, the parts approximated by sutures and not very tightly applied bandage, and warm water dressings applied. In this operation I was assisted by Drs. Diehl, Dambach, Brush, W. W. Miner, and my private pupils Parker and Hopkins, and others. The result thus far is entirely satisfactory; pain gradually subsided from the time of operation, and no unpleasant effects have since been observed. The suppuration in the wound has been moderate in amount, and the secretions healthy in character. The ligatures were removed three weeks after the operation, and the parts completely closed except where the ligature rested. The popliteal nerve was found at the time of the operation, closely and inseparably adherent to the walls of the sac and some pain may reasonably be supposed to attend such condition of the nerve sheath.

It is no part of my purpose to discuss the various operations for aneurism. That opening down upon aneurismal tumors in the popliteal space, and ligating the vessels which supply them, rather than cutting off the circulation by ligation of common femoral, has some advantages I have no doubt; it may also be open to objections, which subject has been thoroughly discussed by George W. Norris, M. D., in his work entitled Contributions to Practical Surgery, in chapter upon mortality following ligation of arteries. This work contains the best resumé of the subject I have yet seen. I have for many years bestowed considerable thought upon the subject, attention being called to it by my first operation, now about twenty years since, for aneurism. This case was one of traumatic aneurism, at the bend of the elbow, about where the brachial artery divides into the radial and ulnar. Without at the time knowing very much what I was about to do, assisted by my former colleagues, Prof. Eastman and Dr. J. R. Lothrop, I opened down upon the tumor applied ligature to the vessels which supplied it, divided the vessels below ligature, and raising it from its bed, cut it out as fatty or cystic tumors would be removed. Return circulation afforded profuse hemorrhage, which was controlled by ligature to everything requiring it. Thus the diseased mass was removed, the wound closed, followed by complete recovery, without an unpleasant symptom. The complete success of the procedure though adopted in my inexperience, and I may say ignorance in such matters, has never failed to impress me with the conviction that aneurismal tumors at the bend of the elbow or in the popliteal space, may sometimes be more safely and certainly cured by extirpation than otherwise, and though I do not ask or advise others to follow my example, still I am willing to speak favorably of a procedure which has served me well when adopted, and which seems to me feasible and philosophical, and to have advantages worthy of consideration.

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ART. II.—*Abstract of the Proceedings of the Buffalo Medical Association, June 16, 1876.* DR. E. N. BRUSH, SECY.

The President Dr. Wyckoff, in the chair. Present—Drs. Rochester, Abbott, White, Fowler, Brecht, O'Brien, Hopkins, Phelps,

Bielby, Howe, Strong, Miner, Wetmore, Hebenstreit, W. W. Miner, Samo and Boysen. Dr. Baker by invitation.

The minutes were read and approved.

The application of Dr. F. A. Burghardt was taken from the table and he was elected a member of the Association.

DR. ABBOT said that he had lately had several cases of inflammation, both acute and chronic, of the eustachian tube and middle ear, in which the treatment which he had pursued, had met with such favorable results that he thought it of sufficient interest to report to the association. He had employed the vapor of hot water, throwing it into the eustachian tube, combining with this, when necessary, an injection of sulphate of zinc, two to five grains to the ounce.

The vapor is forced into the tube and middle ear by forcing air through a flask of water, in a water bath.

He reported the following case :

A reporter on one of the daily papers came to him a few days since, suffering with deafness in the right ear. The watch could only be heard at a distance of two and one-half inches, and ordinary conversation could not be heard at all on that side. The vapor of hot water was employed as described. The patient came every other day until he had four treatments, then, after an intermission of a week, he came again. In that time the hearing distance had increased to two feet. The zinc was used but twice, the improvement was so rapid under the vapor of water that the zinc was not found necessary.

He had another case recently, which came to him complaining of an intolerable itching and accumulation in the external meatus. He supposed it to be a case of *aspergillus fungus*. On examination of the deposit under the microscope, it was found to be this vegetable parasite, which causes extreme itching of the meatus, and frequently, deafness.

Warm water and nitrate of silver gr. xl. to $\frac{3}{4}$ j., were applied, affecting a permanent cure.

He also reported a case which had been brought to him for the removal of a glass bead from the meatus. With the help of another physician, the family physician had made, under chloro-

form, attempts to remove it. The measures undertaken had evidently been of a violent nature as the meatus was filled with blood, and its lining red and swollen. The ear was carefully syringed and a few drops of sweet oil directed to be used. In two or three days the bead dropped out. The case was reported to illustrate the inadvisability and danger of using force in removing foreign bodies from the meatus.

DR. HOPKINS said that he would like to ask Dr. Abbot if the natural history of the disease in the case which he first reported was sufficiently well defined, by statistics, to warrant him in saying that his measures were curative, or whether the cure was simply a natural termination of the catarrhal trouble.

DR. ABBOT replied that he could not say as to statistics, but that the improvement in the condition of the patient's hearing, warranted him in thinking that the treatment which he had adopted, led to the recovery.

DR. MINER asked if simple inflation of the eustachian tube by warm air without moisture would not have produced equally good results.

DR. ROCHESTER inquired as to the use of the eustachian catheter. He said that in his younger days it was frequently used. Heard a distinguished aural surgeon, now living, say that he had no doubt that many cases of deafness were caused by the injudicious employment of the eustachian catheter. Would ask as a matter of information, whether the catheter was as much used at the present day as formerly. It seemed to him that warm water or other substances thrown into the eustachian tube would be liable to produce irritation.

DR. ABBOTT said that he thought the cases were now more carefully selected, that the catheter was not employed as promiscuously as formerly. That in his own practice, where the apparatus of Politzer was used with benefit, he did not employ the catheter, but where the apparatus did not answer the demands of the case, he employed the catheter. He used a hard rubber catheter in preference to a silver one. It should be used with delicacy and care.

DR. STRONG asked if it was always harmless to inject into the middle ear through the eustachian tube.

DR. ABBOTT replied that where the vapor of warm water was used he had never seen any unfavorable results or with mild astringent solutions. It could scarcely be called an injection with the apparatus which he used, but a small amount of fluid could get into the ear.

DR. HOWE said that in regard to Dr. Rochester's question, he had no doubt but what the catheter could be and had been abused. The old method of holding the nostrils shut and swallowing, or the employments of the apparatus of Politzer, acted equally on both ears. With the catheter the medicament could be passed directly to one side, which was one advantage. In another class of cases the secretion is tenacious and sticky, and the tube could not be inflated by the ordinary methods. In reference to Dr. Abbott's method by hot water he found that it did not suit all cases. He had also found that some patients objected to being scalded by hot water.

DR. ABBOTT said that he had never had a patient complain of heat. The apparatus which he used prevented the injection being used too hot.

DR. HOPKINS said that he would like to report a case of tape-worm, occurring in a child of six years. He reported it as being somewhat unusual to find this parasite in so young a child.

He gave half a drachm of kousso, followed by a cathartic, but it was entirely inert.

The fluid extract of the male fern was then used, half a drachm being given in two doses, which was followed by the expulsion of the tape-worm entire.

DR. ROCHESTER said that he had seen a child of two years, which was relieved of a tape-worm by kousso. The explanation of its failure would, perhaps, be that the article was not of good quality. As to the origin of tape-worm Cobbold speaks of the tinea of mutton, pork and beef.

DR. WHITE asked if Dr. Rochester was positive that the tinea of mutton was propagated in the human family. He said that he had seen a statement made to the contrary.

DR. ROCHESTER replied that Cobbold and other authorities affirm that it is.

DR. WYCKOFF suggested that the great frequency of tape-worm might probably be explained by the prevalence of eating beef in an under-done condition.

DR. WETMORE asked if any gentleman had found two tape-worms in the same individual. He had in his office a tape-worm forty five feet in length, with the head attached. Two weeks after its removal another began to pass which was finally brought away entire, by the use of turpentine.

DR. WYCKOFF called Dr. O'Brien to the chair, and reported a case of chronic cystitis in a lady aged forty-eight.

The patient had suffered for several years with cystitis, and had been the victim of various measures for its relief, but to no effect. The bladder was very irritable, the patient finding it necessary to void urine very frequently. On April 20th he dilated the urethra to such an extent that he could introduce the thumb. This was followed by marked relief; the irritability of the bladder was in a measure relieved so that it was not necessary to void urine as frequently as formerly.

On the twenty-third of May he again dilated the urethra so that he could introduce two fingers, he then introduced a speculum that was seven-eighths of an inch in diameter. No incontinence of urine followed, the patient was able immediately afterward to retain the urine, and since then has been able to do so for three or four hours at time. The irritability of the bladder is decreasing and further improvement is looked for.

DR. MIXER said physicians would be surprised, who had not witnessed the operation, at the extent to which the female urethra could be dilated without producing incontinence. This was also the case with the neck of the bladder and prostatic urethra in young males. He had removed from a boy, aged twelve, by the median operation, a calculus, which when grasped in the forceps as it passed through the neck of the bladder, measured four and one-half inches in circumference. This operation was only followed by incontinence of urine for a few days, the boy rapidly gaining control of his bladder as he convalesced. He had on

several occasions gone beyond the limit to which authors state that the neck of the bladder and prostatic urethra could be dilated, but had never met with any unpleasant symptoms resulting from the over-dilation of the urethra.

DR. WHITE remarked that the case reported by Dr. Wyckoff was very interesting ; he could not exactly understand, however, how the simple dilation of the urethra could relieve cystitis, the bladder still remaining continent. The only hypothesis upon which he could explain it was that the irritability was due to spasm of the sphincter vesicæ, which the stretching overcame. He had in New York, some few years since, assisted Dr. Sims in making an operation to establish a vesico-vaginal fistula, to relieve a young woman of cystitis, the object being to prevent the accumulation of urine, and thus give the bladder perfect rest. Dr. White expressed his preference in dilating the urethra for the removal of foreign bodies, or for other purposes, to the employment of a bivalve speculum, by means of which the urethra could gradually be stretched.

DR. WYCKOFF said that he had used his finger entirely, and that by its employment the surgeon could best estimate the extent to which the dilation could be carried without danger of rupturing the walls of the urethra.

DR. WETMORE said that but a few days ago he had the pleasure of listening to a clinical lecture by Prof. Gross, on this very subject, he has great confidence in the employment of injections and the administration of Potassium Bromide and Gelsemium.

He first washes out the bladder with an ounce of water, then with two, and so on, gradually distending its walls. He was very particular in the manner in which the injections were used, it being his object to imitate the gradual distention of the bladder by urine as nearly as possible, and for this reason he began with a small amount of fluid at first and made his injection very slowly.

The Secretary presented a communication from the Boston Society of Civil Engineers, in reference to the metric system of weights and measures. He was directed to acknowledge the communication and inform the committee that some action would

probably be taken on the subject at the coming International Medical Congress.

An amendment to the Constitution and By-Laws presented at the April meeting, was brought up and after some discussion, was made the special order of business at the next meeting.

DR. WHITE moved that when the meeting adjourned, it do so to meet on Wednesday evening, July 5th.—Carried.

The meeting was then on motion declared adjourned.

Medical Notes.

ART. 1.—*Notes on Microscopy.* By GEO. E. BLACKHAM, M. D.

I. The Microscope in Daily Practice. PROF. J. N. DANFORTH, M. D., (*Chicago Medical Journal and Examiner*, September, October and November, 1875.)

In these papers, which are the beginning of a series, Prof. Danforth treats in a simple manner.

1. Of the microscope and some necessary accessories.
2. Of some particular student's Microscopes and their prices.
3. Of the preliminary steps in the examination of fluids and solids.

The general aims and tendencies of these articles are very good but are somewhat marred by much carelessness of statement.

For instance, when he states "As a general rule, the first thing in order is the purchase a microscope; and it is also quite true to say that as a general rule the purchaser gets cheated." This latter statement is pretty generally false. The purchaser is not cheated, but relying on his own judgment, and preferring diameters to definition, he insists on purchasing an inferior instrument.

His specifications of "What constitute a good microscope," are, in the main, good—though where he will find a "parabolic" mirror and why the spherical concave mirror usually supplied is not as good, he does not say.

His statement that eye pieces higher than the A. "are not generally useful," may be true, when cheap French or German objectives are used, but with good American or English objectives the B and C eye-pieces and with Tolles' new duplex or immersion lenses, eye-pieces as high as one-eighth solid, can be used to advantage.

Dr. Danforth only recommends two objectives, the inch and quarter inch. As the latter only gives a power of about 200 diameters on the ordinary stand when used with the A eye-piece, Dr. D. practically limits the power to this. It might do for the first six months or so till the student had learned to manage more powerful combinations, but would be of little use in the examination of blood disks, renal tube casts, and many other of the most important investigations for which a physician would be likely to use his microscope. The addition of a more powerful eye-piece, say B or C or an objective of shorter focus, say one eighth or one-tenth, or of both eye-piece and objective will give the instrument an enormous increase of real value in the hands of a practitioner who really knows how to use it. In the hands of one who does not, the microscope must be only a useless toy, whatever its powers and quality.

In recommending the "bull's-eye" condenser as a needful accessory, Dr. D. is doubtless right, but its value as a "hand magnifier" is practically *nil*, on account of the great amount of spherical aberration.

In his second paper Dr. Danforth describes two "students' microscopes," those of Tolles, of Boston and Zentmayer, of Philadelphia. He gets somewhat mixed on Tolles' instrument, as his illustration represents the fine adjustment by screw and lever to nose-piece, while his text describes fine adjustment by screw and movable plate to stage. The fact is Mr. Tolles makes two patterns of student microscopes, but Dr. D.'s description and price are curious compromises between those of Mr. Tolles' two instruments. Zentmayer's instrument is better described but the price quoted is below that given in Mr. Zentmayer's own catalogue.

Dr. Danforth's disparagement of first-class American stands and wide angled (i. e. first-class) objectives is uncalled for. The familiar fact that much good work is done in Germany with clumsy stands and inferior objectives while but little original work, good or bad, is done in America with our first-class stands and objectives is not due to the quality of the instruments, but to the fact that in America a student may go through his course and get his diploma as M. D. without ever seeing a microscope or knowing anything of its use in medicine.

In his third paper Dr. Danforth comes to the *use* of the microscope, and here he is more at home. His directions and suggestions are excellent and practical except his advice to substitute mica for thin glass covers. The difficulty of procuring mica of uniform thickness, its liability to scratches, &c., afford endless opportunities for error, which may, indeed, be avoided by an accomplished microscopist like Prof. Danforth, but which would confuse and mislead the inexperienced student, to whom these articles are addressed.

We shall follow Prof. Danforth's future articles with interest

and hope they will incite many practitioners and students to take up this beautiful instrument without which their studies must be incomplete and imperfect.

II. *Epithelium of the Mammary Ducts.* ROBIN CH. (*Journ. de L'Anatomie et de la Physiol.* No. 4.)

The galactophorus canals are not provided with a mucous lining. Their epithelium is made up of a thick layer of many sided, almost prismatic cells, having a tolerably large and distinct nucleus. It rests upon a structureless limitary membrane from one to two tenths of a millimeter in thickness, whose adherent surface becomes insensibly united with the laminated tissue of the mammary structure beneath. Ordinarily there are two rows of epithelial cells in this lining membrane, the deepest composed of nucleated epithelium (or "recently-individualized cells") only one hundredth of a millimeter in thickness, having an oval nucleus and no nucleolus. The nucleolus is, however, to be discovered in the nucleus of the epithelium of a certain number of subjects in a healthy condition. In almost all cases of tumors of the breast (the so-called cancerous neoplasms and others) the galactophorous canals which are not destroyed, exhibit a distinctly marked pavement epithelium, composed of fine cells from two to three times larger than those ordinarily described, more or less covered with fatty granulations, and exhibiting a distinct oval nucleolated nucleus, larger than in the normal condition.

III. *Stephanurus Dentatus.*—At a meeting of the Royal Microscopical Society, in London, England, October 4, 1871, Dr. Spencer Cobbold handed in a report on some preparations of entozoa, with accompanying notes, forwarded to the society by Mr. Morris, of Sydney, and made observations on some of the most interesting forms. Dr. Cobbold stated that by far the greatest amount of importance was to be attached to the discovery in Australia, of *Stephanurus Dentatus*. This intozoon was introduced to the scientific world as early as the year 1834, by Natterer, who found it in large quantities infesting the adipose tissues of a breed of Chinese pigs, on the Rio Negro, in Brazil. Up to 1870 nothing further was heard of this parasite, when Dr. Cobbold received a communication from Prof. Fletcher, of New York, stating that it was committing great destruction among the pork raising districts of the United States, thousands of pigs in some localities, falling victims to its ravages. In aspect and structure *Stephanurus* bears a close resemblance to *Trichina*, but it is of much larger size, the cysts of the former frequently measuring an inch or an inch and a half in length; its greater magnitude is the principal safeguard against its introduction into the human subject.—*Quarterly Jour. Med. Science.*

NOTE.—The different habitats of the two parasites is as marked as their difference in size, the *Trichina Spiralis* is found either free in the intestine or in the striated muscles except those of the heart. Readers who find pork infested with either of these parasites will confer a favor by mailing a small sample to the writer, Dr. George E. Blackham, Dunkirk, N. Y.

ART. II.—*Notes on Obstetrics and Gynecology.* By E. N. BRUSH, M. D.

I. Puerperal Eclampsia By SAMUEL C. BUSEY; M. D. (*Philadelphia Medical Times*, Aug. 5. 1876.

Dr. Busey, in this article, which is an abstract from his address as chairman of the Section on Obstetrics of the American Medical Association, refers to the pathology of the disease. He refers at the outset to the fact that primiparæ and plural pregnancies are more liable to convulsions than multiparæ. From this fact and from the fact that "depletion of the gravid womb is the most certain way of terminating the convulsive seizures," he thinks too much prominence has been given to the mechanical theory of causation—obstructive hyperæmia of the kidneys. While he acknowledges the force of the hypothesis he cannot accept its absolute verity. An apparent contradiction to the mechanical theory, lies in the fact that it is the gravid uterus and not every other abdominal tumor, which is associated with albuminuria. He thinks that pregnancy, not the period of utero-gestation, is the essential factor. The cause lying in the altered relation, not of the parts anatomically concerned, but of the functions of the animal economy. He says:

"During pregnancy the mass of blood is augmented, its constituent fibrin is increased, the albumen is diminished, the number of red blood-corpuscles is reduced (most markedly so during the later months); its temperature is elevated, the proportion of solids lessens and the quantity of water increases with the progress of gestation, the normal relation which exists between the fibrin and water becomes disturbed, there is hypertrophy of the left ventricle, the heart becomes stronger, arterial tension (especially in the primiparæ) is increased, and during labor the blood-pressure (Fritsch), both arterial and venous, rises, while a uterine contraction is present. Thus, conditions favoring fibrin-separation and congestions are present to a remarkable degree, and various viscera—brain, heart, lungs and kidneys—may be temporarily congested. There are also added and retained effete products, and consequent increased strain upon the kidneys. In the primiparæ the vascular apparatus (Harcourt Barnes*) is not adapted, and in many pregnant women the assimilation of nutriment is inadequate to the added physiological work, and the tension of the cerebral vessels, which increases with the process of gestation, attains its maximum (Maddent†) during parturition, when convulsions most frequently occur. There is, in addition an increase of nerve force, irritation of the pneumogastric, and a nervous sensitiveness especially characteristic of pregnancy.

The evacuation of the gravid uterus is followed by an engorgement of the abdominal veins, which had been more or less ob-

**Amer. Jour. Obst.*, vol. viii, p. 719.

†*Obst. Jour. Great Britain and Ireland*, vol. ii, p. 239.

structed by the pressure of the enlarged organ. This abstraction of the blood from the thoracic organs and from the brain, harmless as it is in most cases of parturition, and salutary as it proves to be in a majority of cases of convulsions, may result in such a condition of cerebral anæmia, enfeebled and irregular cardiac action, and imperfect decarbonization of the blood, as to become, in conjunction with the deteriorated condition of the blood-mass, the immediate and exciting cause of post-partum convulsions.

The condition of the blood during pregnancy, which is aggravated by the loss of albumen, simulates anæmia, yet the condition of the system is that of physiological plethora, due to the increment of the blood-mass. During pregnancy and during labor the brain may contain a redundancy of this impoverished and deteriorated fluid, and yet be insufficiently nourished. The sudden engorgement of the abdominal veins after delivery, may withdraw from the cranial cavity the requisite amount of fluid. In both instances the brain is anæmic, in one case containing an excess, in the other a deficiency, of the altered and toxæmic blood."

It is these departures from the state of health, due to pregnancy; he thinks we must look for the predisposing and proximate causes of puerperal convulsions. He refers in conclusion, to some additional facts which have come to our knowledge. He says that the once accepted theory that convulsions were occasioned by a determination of blood to the head, gains some force from the points of resemblance pointed out by Prof. Walley, between the cerebral circulation in woman and the cow, to whom, parturient apoplexy and convulsions are mainly confined. These points of resemblance are in connection with the distribution of the internal carotid artery, the formation of the basilar artery and the circle of Willis, which favor a larger and more direct supply of blood to the brain. If these researches should be correct, we have then, during pregnancy, a peculiar condition of the blood, increased arterial tension, augmented blood-pressure and an anatomical arrangement of the vascular supply, which favor intercranial congestion. To these he would add, toxæmia, from destruction of the red blood-corpuscles, and retained effete products from renal congestion; malnutrition, from loss and consumption of albumen and from an inadequate supply of nutriment; deficient consumption of oxygen, from diminution of muscular action.

The paper concludes with an account of the observations of Bourneville and others upon the elevation of temperature in puerperal eclampsia. Bourneville makes the following conclusions:

"1. During the eclamptic state the temperature is raised from the outset of the attack to its termination.

"2. In the intervals of the attacks the temperature remains elevated, and at the moment of the convulsions a slight accession takes place.

"3. If the eclamptic condition is about to terminate in death, the temperature continues to augment, and reaches a very elevated figure; if, on the contrary, the attacks diminish and the coma ceases in a definite manner, the temperature lowers progressively and returns to the normal standard."

After a brief consideration of the therapeutical indication of these facts, Dr. Busey concludes: "I will advance a step further, and submit the proposition that the various methods of preventive treatment owe their efficacy to their effects upon the blood mass and blood-vascular system. As a rule these are directed to the promotion of digestion, whereby the loss of albumen is replenished, and to the diminution of the hydræmia, by catharsis, diuresis, or diaphoresis."

II. A New Device for Securing Union in Staphyloraphy, Vesico-Vaginal Fistula, etc. By A. SCHEIBENZUBER, M. D. (*Ohio Medical and Surgical Journal*, Aug., 1876.)

The "Device" here described consists in passing the thread or wire through the edges of the fistula, allowing the edges of the holes to cicatrize and then pare the edges of the fistula and tighten the sutures. The object of allowing the needle holes to cicatrize is to prevent the thread tearing out when the sutures are drawn tight. As the inventor of this ingenious device does not report a case illustrating its use in vesico-vaginal fistula, we presume his knowledge of its merits in such cases is purely theoretical, practically he would find that the small needle holes, whose edges were cicatrized, would give him as much trouble as the original fistula, he would only be multiplying his difficulties, in most cases. In an operation for staphyloraphy, it might be of value, but we think that the section of the tendons of the levator and tensor palati muscles would obviate all difficulty in most cases from the thread tearing out.

III. Two cases of Pessary Impacted in the Vagina for more than a year. By GEO. BUCHANAN, M. A., M. D., (*Obstetrical Journal, Great Britain and Ireland*, July, 1876. Incarcerated Pessary. By DR LYMAN, in Proceedings of Boston Obstetrical Society. (*Boston Medical and Surgical Journal*, August 17, 1876.

The first case of Dr. Buchanan's was in a lady aged forty-eight. The pessary had been introduced nearly five years previously for prolapsed uterus. The patient was put under chloroform and after considerable effort the pessary was extracted. One of its limbs had ulcerated through the outer wall of the vagina, into the bladder, and was coated with a quarter of an inch of urinary deposit. Case second was a lady aged sixty-one, over a year previous to her being seen by Dr. Buchanan, a modification of Hodges' pessary had been introduced to support the uterus. The ring of the pessary was found to have ulcerated into the lat-

eral vaginal wall to the depth of an inch, the ulcerated edges had fallen together and united, making it necessary to use the scalpel in removing the instrument. The reporter of these cases makes some very pertinent remarks upon not trusting too much to the "common sense" of the patient in cases like these, explicit directions should always be given to patients entrusted with the charge of any instrument or mechanical appliance. He advocates in prolapsus in women past the child-bearing period, the operation for occlusion of the vagina as preferable to the use of pessaries.

Dr. Lyman's case had worn the pessary for five years, its removal was attended with pain and some hemorrhage. The cervix uteri was deeply ulcerated and there was some leucorrhœa. The upper half of the pessary was deeply imbedded in the posterior cul-de-sac, and was roughened and corrugated. In his remarks upon the case Dr. Lyman very truly remarked that pessaries were often introduced without necessity. Other physicians present were of the same opinion, and remarked that they frequently did more mischief than could be counterbalanced by the good they were intended to accomplish.

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MISCELLANEOUS.

A CASE OF URETEROPLASTY.—By Prof. Nussbaum, of Munich. (Abstract from Bavarian *Intelligenz Blatt*, by Dr. Petershausen.) —Ovariectomy has been performed more than a thousand times, when it happened that Prof. Simon, of Heidelberg, accidentally cut through the left ureter at an operation. As he was compelled at the same time to remove a large part of the uterus, the urine afterwards ran both through the abdominal fistula, which formed itself in the cicatrix, and through the cervical cavity and through the vagina. Great suffering was caused to the patient by this state of things. But at last the professor ended her miserable condition by resorting to nephrectomy, which operation was a complete success, the remaining kidney assuming a two-fold function. Afterwards a similar misfortune occurred to Prof. Nussbaum, while removing an ovarian cyst of fifteen years' standing. The most difficult part of the work was the separation of the tumor from the uterus. Thus far the operation was successful; but it was noticed that, after several days, the quantity of urine was much less than it should have been, while at the same time a watery excretion oozed out of the abdominal wound. A close examination of the excretion showed that it contained urine. As the bladder was not injured, it seemed that the injury resembled that in Simon's case. An examination proved that the right ureter, which was closely connected with the ovary, had been cut during

the operation. The woman made a quick recovery, but as there remained an abdominal fistula, through which one-half of the urine escaped, the poor woman was so exceedingly troubled by it that the doctor at last concluded to put an end to her suffering. There were different methods which the doctor had in view for this purpose. In this case he thought it would be best to conduct the urine, excreted by the fistula, to the bladder by the shortest way. This could be done, either by uniting the cut parts of the ureter or by forming an artificial one. The doctor intended to try the first method. The abdominal fistula was dilated for two days by laminaria bougies. Then intruding his left forefinger into the fistula, he could reach a reservoir of the urine, and the termination of that part of the ureter which was connected with the kidney. To reach the other end of the ureter the doctor widened the urethra by Simon's dilator, but he was unsuccessful in finding the termination of the ureter. When he introduced a male catheter into the bladder, and pushing the latter upwards by it, his left forefinger in the fistula could be touched, the intervening space being no greater than inch. This space was now penetrated by a trocar, and in the opening there was introduced a drainage tube. To its lower part there was attached a glass tube with a broad margin, by which an escape of the drainage tube toward the fistula was to be prevented, while a silver wire, fastened to the upper end of the tube, was led from this point through the fistula, and, by strips of adhesive plaster, attached to the skin. The drainage tube, which in this manner was kept in position, was intended for a supplementary ureter. Incontinence followed for three days, but in general the patient got along nicely. Some days later the tube unfortunately escaped, in spite of its rim, through the newly formed ureter, and this became obstructed by flocculent matter. The urine was again excreted by the fistula, and the doctor had to introduce another tube. The upper end of this was likewise connected with a silver wire, but it was so much longer that its lower end protruded from the urethra so that the urine ran into the vessel. The patient was very unwell for some days; but little urine was excreted by the fistula. To the astonishment of the operator he found the drainage tube, two days after its introduction, upon the patient's belly. This tube had also slipped upwards, as in the previous instance. However an injection of litmus solution convinced the doctor that the artificial way was still open, and consequently, he did not introduce another tube. The artificial way kept intact, a normal quantity of urine was excreted, and when, several weeks later a few drops of urine were still excreted by the fistula, which was then very narrow, this was closed by cauterization. The patient's health became excellent afterwards."—*Medical Record*.

Bonwill's Method of Anæsthesia in Diseases of the eye.

By P. D. KEYSER, M. D.

It is a well known fact that in ophthalmology there are many little operations of a painful nature that occur almost daily in hospital as well as in private practice, which are really too quickly performed to require the use of an anæsthetic, but which in many cases, from the great pain and sensitiveness of the patient, cannot be made without it; and in many, if not the majority of cases, there is such an after-sickness and depression from the use of ether or chloroform that it seems very hard that one should suffer so long with this dreadful nausea for a little affair that could be accomplished in a few seconds without any after-suffering, if the patient could only hold still for a moment.

How grateful, therefore, should we feel for the suggestion of anything to take the place of ether or chloroform in dulling sensation in cases of small operations, where complete anæsthesia is hardly necessary.

Some considerable time ago, my friend Dr. W. G. A. Bonwill, of this city, related to me his experience with the use of air as an anæsthetic in dental operations, and asked me to try it in my practice; since which time I have tried it with very happy results on many occasions. My experience with it has been, however, entirely in small or rather short but painful operations, as its anæsthetic action is not long enough for larger or more tedious manipulations.

Foreign bodies in the eye are of very frequent occurrence, and in children and nervous people, who will not remain quiet, very difficult of removal. In such cases I have found that by getting the patient to make deep and quick inspirations of the ordinary air of the room for a few seconds to a minute or so, the eye can be opened without difficulty, and the foreign body removed from the cornea or under the lid, with ease, and without the least pain or inconvenience to the patient.

In cases of painful hordeolum, which require to be opened, it affords a most happy assistance.

In slitting up a canaliculus, as well as in the introduction of Bowman's probes, it is equally efficient.

It is to my mind one of the simplest and at the same time one of the most beneficial agents in small operations about the eye that has been presented to the profession; its application being very easy, requiring no recumbent position on the part of the patient, calling for no apparatus for its administration, and being perfectly free from any of the disagreeable effects of ether and chloroform.

To produce the proper effect the patient must open his mouth,

breath freely, quickly and deeply, and after a few seconds or minutes of such steady and continuous breathing, the symptoms of partial anæsthesia supervene, as is evinced by the absence of feeling in pinching or pricking with a pin. At this stage any operation should be made. The anæsthetic feeling passes almost immediately away, and the patient feels no pain in the operation if done dexterously and without hesitation.

From my experience I take pleasure in recommending its use very highly, not only to ophthalmologists, but also to the general surgeon, where minor operations are to be performed.

Any one interested in the subject I would refer to an article by Bonwill on "Air as a an Anæsthetic," in the *Pennsylvania Journal of Dental Science*."—*Philadelphia Medical Times*.

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Spontaneous Cure of an Ovarian Tumor.

By OWEN WRIGHT, A. M., M. D.

On the 20th of November I was called to see Mrs. A. B. I arrived at the house at 4 o'clock, P. M. She was expecting to be confined at any hour, but was not presenting any symptoms of labor. At 10 o'clock of the same day she was taken with a chill and fever; and when I saw her the breathing was 28, the pulse 200 per minute. I was not able to ascertain the cause of the excitement, although I knew it was of local origin. I remained with her all night, and met the indications for treatment according to my abilities. At 5 o'clock the next morning, labor came on and terminated favorably in one hour. It was not until after the child was born that I was able to discover the cause of the chill and fever.

In the region of the left ovary was a tumor, that the lady had never noticed; she was so very large (although a medium-sized woman) that I did not find it, although I passed my hand over that region several times. The patient was so feeble, that I gave her constitutional treatment the following four weeks. All this time the tumor continued to enlarge; and its pressure from within outwards, caused an injury to the external parts, immediately above the os pubis.

My diagnosis was a cystic tumor of the ovary; and the 30th day after delivery, I performed the operation of paracentesis, and drew off about one gallon of serous fluid. It continued to discharge one week, during which time the parts exterior, all of three by five inches, sloughed away, so that the remains of the tumor could be seen. During another week the wound failed to heal, and

a second like tumor reached half the size of the former. At this period the prospects of success were not very flattering. Another week under treatment and the tumor burst, and almost at the same time the fluid entered the womb through the fallopian tube and was discharged through the vagina. After this the wound began to heal: the vaginal discharge continued occasionally another week. The constitutional symptoms improved rapidly, and at the end of three months the mother walked out doors.

During her pregnancy the mammary glands did not increase in size. I do not think either of them would have weighed over one ounce, till about the ninth week after her delivery, when she noticed that her breasts were filling.

She is about 30 years old; her weight is 130 pounds. She has borne two other children, and each time was afflicted with nursing sore mouth.—*Chicago Medical Journal and Examiner*. [May this not have been tubal dropsy or a cyst of the broad ligament, Ed.]

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Notes on the Local Treatment of Certain Diseases of the Skin.

BY L. DUNCAN BULKLEY, A. M., M. D.

In a former article* I directed attention to the fact that in the practice of dermatology there was a constant necessity for discrimination in the use of local measures, and that diseases of the skin were to be treated on principles corresponding much to those applying to general medicine, and that while harsh and stimulating remedies may be successful in the hands of those well versed in their use, in many cases, the same treatment indiscriminately employed is fraught with danger here. Some mention was made of the use of baths, especial reference being to full water baths, medicated to suit the case, as will be detailed later on. A word may here be given in reference to sulphur vapor baths, which I constantly see misused. The impression is common that they are of much service in diseases of the skin, and they are ordered for the most diverse states. Sulphur has attained its reputation in this class of disease largely from its almost specific power over scabies, when properly used, but in my experience sulphur baths as ordinarily given have but little effect on the itch, and cannot compare with a thorough use of sulphur ointment. In psoriasis sulphur vapor baths are sometimes of service, but I have now under my care a young lady in whom six sulphur vapor baths, ordered by a previous physician for a very local psoriasis, caused the development

*Archives of Dermatology, April, 1876, p. 212.

of a very general, greatly inflamed eruption, eczematous in nature, covering all of both arms, the neck, thighs, &c., to the great discomfort of the patient. This form of treatment is very seldom applicable to eczema, but where the disease is very chronic, and there are no moist portions, and the skin is found to be not very susceptible to external irritants, it may be recommended with advantage, but must always be prescribed with caution. I am pretty sure that I have seen more harm done in general from the use of sulphur vapor baths in the hands of others, than I have witnessed good, when I have ordered them.

Having premised this much in general, I will detail briefly the local treatment I am in the habit of using in public and private practice in the various diseases affecting the skin, and for convenience of writing and reference I will refer them in alphabetical order. It will be understood that I do not propose to enter the subject of the general treatment of these diseases, nor do I by any means wish to place local treatment before the management of the patient, and the proper use of internal remedies. The object of article is only to report for the use of the general practitioner, the local measures which may be safely employed, as I have used them conjointly with constitutional treatment. I will not quote authorities, nor even give credit for any of the prescriptions, for it would be a very difficult task to state whence my information was derived in many instances, or whether the practice was original with myself.

I. *Acne*. More cases of acne require, in my judgment, a soothing or moderately astringent local treatment than one stimulating or harsh in character. Perhaps the most universally applicable agent is hot water, which most certainly relieves the inflamed masses of very acute acne, and more sluggish elements of indurated and rosaceous acne. The water, as hot as can be borne, is applied with a cloth, holding it the face for a few moments repeatedly, until every portion of the eruption has been soaked several times. The face is then dried and an astringent lotion is applied: the one I commonly use is as follows: $\mathcal{R}$. Potass. Sulphuret., Zinci Sulphat., aa 3 i.; Aquæ Rosæ 3iv. M. When there is more inflammation, and there is burning and some itching, still more soothing applications are necessary, and this lotion may be applied repeatedly during the day: $\mathcal{R}$. Pulv. Calamin. prep., 3 i.; Zinci Oxidi, 3 i.; Glycerin., 3 ij.; Aquæ Rosæ vel Aquæ Sambucci, 3iv. M.

When the masses are larger and more obstinate I find very good results from a wash of Ether and Sulphur, thus: $\mathcal{R}$. Sulph. lot., 3 i.; Etheris Sulph., 3 iv.; Alcoh. 3 iii ss., M. Not unfrequently far more stimulating applications are required in acne, and use is made of potash applications, soft soap, etc. But these are not to be used when the face is inflamed, or when there is much development of new acne elements; when the skin is dry, when come-

donees are abundant, and when the papules, or pustules are sluggish I use with advantage, a wash of caustic potash, from 5 to 15 grains to the ounce of rosewater (far more frequently the former strength and rarely the latter), and this is followed by one of the following ointments, mentioned in the order of increasing strength : *R.* Zinci Oxidi, 3 i.; Ung. Aquæ Rosæ. 3 i. *M.* : *R.* Unguent. Hyd. Precip. Alb., 3 ij.; Ung. Aquæ Rosæ, 3 vj. *M.* : *R.* Unguent. Hydrarg. Oxid. Rub., 3 ij.; Ung. Aquæ Rosæ, 3 vj. *M.* : *R.* Unguent. Hydrarg. Niträt., 3 ij.; Unguent. Aquæ Rosæ, 3 vj. *M.*—these may be further increased in strength as the exigencies of the case demand.

A very important point to be borne in mind in prescribing for acne is that if a mercurial and a sulphur application are made conjointly, or immediately following each other, chemical change takes place, and the skin is very unpleasantly darkened, often causing much alarm ; patients should therefore be cautioned to allow at least 24 hours to elapse, with repeated bathing in hot water, between the use of any preparations containing sulphur and those with mercury or lead.

When the production of inflammatory papules has about ceased, I find advantage from the use of the German green soap, *sapo viridis*, which the patient rubs on the skin pretty firmly with flannel and warm water at night. If any of these applications dry the skin too much, I find much benefit from the use of sweet cream from milk, (a saucer of good milk standing over night will produce enough cream for a day's use), or the Vaseline answers very well, or ordinary cold cream, Ung. Aquæ Rosæ.

The comedones, or clogged subaceous glands, are best emptied by pressure upon them with the end of a small tube, with an aperture of about 1-16 of an inch, or a new watch-key ; the orifice is placed over the little black speck, and firm pressure is made perpendicular to the surface, when, in most cases, the worm-like mass will rise partly or completely from its gland, and may be readily removed. The masses in indurated acne should be opened with a lancet inserted perpendicularly, as soon as pus is discovered; it is also best to open all suppurating glands as early as practicable.

II. *Alopecia.* Alopecia is such an indefinite term, and baldness may result from so many causes, that it is different to lay down any definite line of local treatment. Where it is the result of a seborrhœa, in which case the dandruff is a prominent feature, the treatment of this is necessary to the cure of the former. Locally the following ointment has proved serviceable in my hands in removing the scalliness and restoring the hair : *R.* Tinct. Cantharid. 3 i.; Ung. Hydrarg. Niträt., 3 ij. Ung. Aquæ Ros. 3 vj. Ol. Amygdal. Amaræ. gtt. ij. *M.*

Where the loss of hair is the result of ringworm, and occurs in spots, with a dirty, slightly scaly surface, and nibbled off hairs,

the parasite disease must be removed before the hair can be restored. In the fall of hair due to syphilis, it is best not to attempt any local treatment until its advance has been arrested by internal treatment, as the applications made will be pretty certain to have the immediate effect of increasing the shedding of the hair; after the hairs have ceased to fall the following wash may be used, though I question if the hair is not reproduced quite as quickly without any local treatment: $\mathcal{R}$. Tinct. Cantharid, $\mathfrak{z}$ ij.; Tinct. Capsici, $\mathfrak{z}$ iv.; Olei Ricini, $\mathfrak{z}$ ss.; Aquæ Cologniensis ad. $\mathfrak{z}$ iv. M. The same application is a valuable hair stimulant in the loss of hair after febrile diseases, and in simple debility, the proportion of the cantharides and capsicum may be increased until slight tingling and redness follows a pretty firm application, with a bit of flannel. Quinine is also a good hair tonic, and may be used in the proportion of fifteen or twenty grains to the ounce, with half a drachm of tincture of nux vomica, and equal proportions of bay rum and rose water.

II. *Bromidrosis*. Offensive sweating of the hands, feet, axillæ, etc., is generally associated with or dependent upon excessive sweating or hyperidrosis, and the two may therefore be considered together. I have had good results from bathing the parts once or twice a day with tincture of belladonna, or it may be rubbed in, care being taken not to produce too great constitution effects by it. About the best local treatment for the excessive sweating of the feet is the Unguentum diachyli of the German Pharmacopœia, applied twice a day, and worn continuously next to the skin. I have long used it and found it generally successful, but the belladonna is cleaner and perhaps equally efficacious. Salicylic acid also gives good results either used in solution, a drachm or two to the ounce, with a little borax, or in powder, thus: $\mathcal{R}$. Acidi Salicylici, $\mathfrak{z}$ iv.; Zinci Carbonat. precip., $\mathfrak{z}$ iv.; Magnes. ustæ, $\mathfrak{z}$ iv., Pulvis Lycopodii, $\mathfrak{z}$ i ss. M.

Cleanliness, is, of course, all important, and the dipping the feet into very hot water before the application of the remedies will facilitate the cure, and the addition of a moderate proportion of tannin in the water (from two to four drachms to the pint) will further assist.—*Archives of Dermatology*.

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The Management of Albuminuria.

In an article in the London *Medical Times and Gazette*, Dr. W. H. Dickinson, of London, writes:—

To give rest, as far as may be, to an inflamed structure, is an old sound maxim; and it is not less obvious, in regard to the system at large, that if a great channel of exit be obstructed, the materials which therefore tend to accumulate should be sparingly

introduced. The diet with albuminuria, save with that of lardaceous origin, in which the secreting power is until late little interfered with, while an exhausting discharge may have to be obviated, should be below the custom of health in its nitrogenous components. It may abound in milk and farinaceous matter, while fish may often take the place of flesh. The increase of albumen in the urine, upon a too early resort to a meat diet, is a common experience. With regard to liquids, it cannot be too strongly insisted upon that the functional strain upon the kidney is not to be measured by the quantity of water which filters through it, but by the quantity of refuse, mainly nitrogenous, which it has to convert and eliminate. Water, which probably transudes almost as through dead membranes, probably makes little demand upon the real secretive function. The worst kidneys, indeed those most hopelessly incapable of their special work, will often discharge most of it; and it is easy to see that its passage, not to be regarded as the result of glandular effort, is salutary, both in the dilution of scanty and irritating urine, and also in washing out the solid products which, under the inflammatory process, collect mischievously in the tubes. A further use is to be discerned in this law. The solids of the urine vary with its water. With given kidneys, the solid excreta wax and wane with the bulk of the urine. Any means, therefore—mere aqueous filtration as safely as any—which increase this will also magnify the components of the secretions which are essential to life. With tubal nephritis, therefore, and scanty urine, an aqueous dietary, even with the addition of distilled water, or the element in some slightly sophisticated shape, will prove in every sense beneficial. In many, perhaps in most, cases of nephritis of tubal origin these remedies of patriarchal simplicity, "spare diet and spring water," are all that are needed to guide the disorder to its natural cure. To this surest and safest of diuretics others must often be added, both to lessen dropsy and to avert the dangers of uræmia. The old rule is that, in recent cases, digitalis should be used; it seldom fails to increase the flow of urine, but I am not sure that it does not sometimes do so with some exasperation of the inflammatory action. The bitartrate and acetate of potash, which have a purgative as well as a diuretic action, may probably be safely resorted to; and in chronic cases as much as may be done harmlessly by diuretics may be accomplished by means of scopolarium, nitre, and juniper. Cantharides and the more irritating agents of this class are generally distinctly injurious. Perhaps, next to a regulation of the diet, it is most important to secure a daily and somewhat loose action of the bowels. Purgatives lessen the vascular tension, which, in both acute and chronic cases, is a measure of their danger; and while it is not advisable too largely to divert the urinary fluids by severe catharsis, increased hardness of the pulse, and other more obvious aggravations of the general state, seldom fail to ensue upon constipation.

When cerebral uræmia is threatening, hard purging by elaterium or otherwise is essential. As a habitual laxative, a drug less used than it deserves to be—sulphate of potash—given two or three times a day in doses of from ten to twenty grains, is sometimes invaluable. It may be aided, if necessary, by Epsom salts or cream of tartar.—*Med. and Surg. Reporter.*

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The Use of Aromatic Sulphuric Acid in Necrosis.

BY EPHRAIM CUTTER, M. D., CAMBRIDGE.

April 10th, 1875, Dr. A., of Worcester, requested the writer to remove the necrosed alveolar process of his wife's sister. She was of middle age, pale, thin, weak, anxious, and worn. She had suffered much with her teeth. Her upper right middle and two lateral incisors were found to be loose, and their lower edges hanging below the line of their fellows. There was a fungoid, spongy swelling over the front of the diseased process. When this was pressed, pus freely exuded from several openings, and also from a softish, elastic swelling as large as a hazel-nut, situated at the dome of the hard palate inside the mouth. The loosened teeth could be freely moved in every direction with the thumb and fingers. The roots of the teeth distinctly grated against the sound alveolar process. There was a complete separation of the teeth and the bone. Dr. A. said that he had thought of using the aromatic sulphuric acid, but that the disease was so extensive and the separation so complete that he regarded it as useless to try to save the teeth in any way. It appeared to the consulter, however, while the surgical extirpation would be effective and justifiable, that if free incisions were made into the swollen and spongy gums there would be an evacuation of the contents of the dilated capillaries and abscesses; that a healthy action would be promoted by relieving this unnatural distention, and that the necrosed bone might be slowly removed by the stimulation of the aromatic sulphuric acid topically applied without destroying the teeth. It was thought that then the periosteum would lay down new bone in place of the old, and refasten the teeth in their old place. It was agreed to employ the following:

R̄ Aromatic Sulphuric Acid. ʒ j.
Aqua ʒ j.

By means of a half-ounce syringe supplied with a small ivory tip, one inch and a half long, and one eighth inch in diameter, the acid solution was injected at first twice a day and afterwards once

a day. About two drachms were used at each injection. The syringe tip was deeply buried into the soft tissues through one of openings. Pus would freely exude from the other openings, even from that in the top of the mouth after each injection.

Tonics were administered. A diet of animal food and unbolted wheat was rigidly maintained.

From the outset of this departure a marked improvement in the soft tissues occurred. But the teeth remained loose and dangling, and Dr. A. thought their recovery doubtful. It was re-suggested that it would be an easy thing to remove them at any time if they did not reset, but that the process of replacing old with new bone was of necessity a slow one.

In about forty days the outer incisor became solidly fixed in its old site. Then the next incisor also tightened. The middle incisor tightened slowly. In November following it could be very slightly moved, but its edge was a little below the line of the other teeth. The other two incisors were as stiff as they ever were. A few spiculæ of bone were removed from the front of the alveolar process during the period of the treatment. In the mean time the general health of the patient improved greatly. She gained in weight, color, and strength. At the present time (July, 1876) she is entirely recovered.

We think it is reasonable to connect the result in this case with the means employed, the acid, the tonics, and the food.

Dr. Atkinson, of New York, has reported some remarkable instances of cure of necrosis by this agent used in its full strength, it is said. It hastens the disintegrating and separating processes, and at the same time destroys the germs of parasitic micrographic growths in the dead and dying bone. According to Dr. Atkinson, it does not act unhealthily upon sound tissues whose vital connections are unimpaired. No substances stand higher than the mineral acids as antiseptics and destroyers of bacteria, amœbæ, and vegetations of animal secretions. Were it not for their caustic effects they would long ago have supplanted carbolic acid.—*Boston Med. and Surg. Jour.*

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The Esmarch Bandage and its Substitutes.

By R. J. LEVIS, M. D., Surgeon to the Pennsylvania Hospital.

The advantage of the elastic bandage in securing bloodless operations are now generally recognized by surgeons, and some practical suggestions, intended to impress the profession in regard to its great merits and which will facilitate its general use, may be acceptable.

In the last issue of the *American Journal of the Medical Sciences*

is a communication from Dr. David Little, which is inclined to disparage the merits of the elastic bandage, as compared with the substitution of an ordinary muslin roller bandage which he recommends for such purposes. Immediately on the first publication of Professor Esmarch's article on the avoidance of hemorrhage by the use of an elastic bandage, and before the proper appliance was obtainable, I repeatedly used the ordinary muslin roller to effect the compression, and am able, from practical experience, to give evidence of its decided inferiority to the india-rubber bandage.

The peculiar advantage of the elastic bandage is the *equable* and *continuing* pressure which is produced in applying it, so that the blood is gradually and continuously forced upward, and none is retained, as with the muslin bandage, between irregularly constricting lines of the circular turns. The muslin roller well applied may answer somewhat effectively, as I know from experience, particularly on attenuated limbs or on the distal portions of extremities; but surgeons may be seriously disappointed in producing with it bloodless operations in the upper portions of limbs of vigorous patients, especially of those which are large or very fat. If, on an emergency, the simple muslin bandage be ever resorted to, I recommend that two such bandages be placed on the limb, every turn of the bandage made by the surgeon being *immediately* followed by another similar bandage in the hands of an assistant; thus equable, continuous, and forcible pressure may be effected. A better and more effective bandage than that of muslin for bloodless operating may be made of a good quality of ordinary flannel, long enough to encase the limb well, with full allowance for overlapping of edges.

I have for a long time discarded the use of the elastic webbing and constricting tubing, as proposed by Professor Esmarch, in favor of a bandage made of pure india-rubber. The bandage which I am in the habit of encasing the limb is five yards long and two and a half inches wide; and the constricting band or tourniquet is of a much thicker and stronger material, two yards in length and one inch and three-quarters in width. The pure india-rubber bandage has the merits of greater elasticity, strength, durability, cleanliness, cheapness, and more perfect adaptability. The constricting band is perfectly effective as a tourniquet, without the great disadvantage of the narrow tubing of Professor Esmarch in producing severe linear pressure, which, it is known, has often caused more or less enduring paralysis from extreme nerve-compression. My tourniquet band is without the complications of chain and hook, as in Professor Esmarch's, the final securing being simply effected by tying together pieces of strong cord, one of which is permanently attached through a hole in each end. The elastic bandage, as I have described it, can be procured of Mr. Levick, manufacturer of india-rubber articles, 724 Chestnut street, Philadelphia.

It should be borne in mind that the advantage of the Esmarch bandage is not alone in the avoidance of the loss of blood in the patient, but every surgeon who has effectively used it in operations as the excisions of joints or of necrosed bone is aware of how the completely exsanguinous condition of the tissues, resembling those of the cadaver, facilitates the accuracy of the procedure.

Mr. Erichsen has made the remark that he "fears that the cultivation of surgery as an *art* is not keeping pace with the progress of surgery as a *science*;" and the surgeon who appreciates the value of what is well expressed in an aphorism from a recent address of Sir William Fergusson, that "the glory of surgery is *precision*," will surely recognize in the use of the elastic bandage an advancement in the precision of surgical art.—*Phila. Med. Times*.

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Effect of the Loss of Consciousness upon the Memory of Preceding Events.

In the *Sanitarian*, February, 1876, Prof. Frank H. Hamilton, M. D., President of the Medico-Legal Society, New York, etc., has the following valuable remarks on this topic:

Some years since, I was consulted by a lawyer of considerable experience in criminal jurisprudence, in relation to the case of a client who had been arrested for as-sault, under the following circumstances: A woman occupying an apartment alone in a tenement house, charged that she had been assaulted in the night, while in bed, by a man wearing a mask; that during the struggle which ensued the man struck her with a club upon her head, rendering her insensible; and that she remained in this condition till morning, when, consciousness having returned, she called in some one who was passing. She was found with her clothes on, lying upon the outside of the bed, and with a wound, accompanied by considerable swelling, upon her forehead. She then stated how she had been assaulted, declaring that she recognised the man, and upon her statement my friend's client was soon arrested.

I gave it as my opinion that, if she was insensible during several hours following the receipt of the injury, her testimony as to what transpired immediately preceding the unconsciousness ought not to be allowed much weight; and that the fact that she claimed to be able to recall all the events, up to the final blow so distinctly, furnished, to say the least, some ground for suspicion that it was all a fraud.

Subsequently, it was ascertained that this woman, who had borne a doubtful reputation among her neighbors, had been found drunk in the streets on the night of the assumed assault, and that

another woman had lifted her up and conducted her as far as the door of her house. The case was dropped; but my attention being called by the value of testimony given under such circumstances, and from that time until the present I have continued to make and record occasional observations upon the subject, as opportunities have been afforded. My observations, have, indeed, been quite numerous, but only those which have been carefully recorded constitute the basis of my present remarks.

South, in his notes to Chelius' Surgery, mentions a case in which a woman in a comatose condition, suspected that it was due to extravasation of the blood, and applied the trephine, when, upon the escape of imprisoned blood, the woman recovered her senses promptly, "and was able to give a clear account of the manner in which the accident occurred." No doubt the writer reported the facts in this case correctly, and there was no failure in the memory of preceding events, but this is not what always happens; indeed, in a case of my own, of a very similar nature, the patient having been blown up in a steamboat explosion, causing a fracture of the skull and a rupture of the middle meningeal artery, incision of dura mater brought relief and restored consciousness; but although his recovery was complete, he was never able to recall any incident connected with the disaster, or any event of the day on which the accident occurred.

My experience has also led me to regard as apocryphal those stories which are now and then related in daily newspapers, and sometimes in journals devoted to science, of persons, who, having been stricken down with sudden loss of consciousness while speaking, have, upon the restoration of consciousness after the lapse of many hours or days, proceeded to finish the broken sentence, or have taken up their thread of thought as if no interruption had occurred. When the conscience has been transient or momentary, I think I have seen this happen; but not when it has been complete and prolonged. It may not be proper to deny positively that such a case has ever occurred; but no such example has ever come under my observation, nor have I seen recorded a case properly authenticated.

It is apparent that the questions which this subject opens, as to the admissibility of the patient's testimony under these conditions, have a very wide application, and that, if possible they ought to be determined by a reference to carefully observed facts.

Complete but temporary unconsciousness may be occasioned by a blow upon the head, causing concussion of the brain; by compression of the brain, ensuing from a fracture of the skull with depression of the fragments; by extravasation of blood within the skull; by embolism of the cerebral artery; by syncope; by epilepsy; by the inhalation of anæsthetics; by alcoholic inebriation, which is only a form of anæsthesia; by the use of opiates and other narcotics; and, perhaps, by many other causes.

Even sleep, a natural event, which occurs without any positive cerebral disturbance, may possibly, at times, cause a break or a failure in the memory. At all events, it is a proper question for consideration.

In the large majority of cases, however, which come under the observation of the medical jurist, the insensibility will be found to be due to concussion and compression of the brain, caused by blows inflicted upon the head, or by the shock incident to railroad or other serious accidents; and it is quite probable that the laws which govern the recollection of preceding events will be found, upon thorough examination, to vary according as the loss of consciousness may be due to one or the other of the many causes above enumerated; but my observations are not at present sufficiently extensive to enable me to note such differences, if they actually exist. No attempt will be made, therefore, to do more than lay before you a few facts, and to suggest a few general inferences, but with no pretence that these inferences are entitled to be considered in the character of a well-established law.

You will better appreciate the pertinence of the examples if we reverse the usual order of consideration, and place before you briefly the conclusions, before reporting the cases from which the conclusions have been mainly drawn.

1. A temporary loss of consciousness does, in many cases, impair the recollection of events immediately preceding.

2. In some cases it does not.

3. Impairment of memory, caused by loss of consciousness, is of two kinds:

(a) Complete obliteration of memory, dating from a period of time or from an event which the patient can distinctly name.

(b) Events may be remembered up to the moment of the receipt of the injury, but with a degree of confusion and uncertainty.

4. In the case of complete and sudden obliteration of memory, dating from a period preceding the injury, the length of this period will, in general, have relation to the degree and length of the insensibility. If the patient is unconscious but a few moments, or if the loss of consciousness is only partial, he may recall events nearly or quite up to the moment of the receipt of the injury. If, on the other hand, the loss of consciousness is complete, coming to coma, and prolonged, it is probable that he will have forgotten events for some time preceding the injury.

In reference to that class of cases in which the memory of events is retained up to the the moment of the accession of unconsciousness, but in which the memory is confused and uncertain, it may be observed that they are likely to possess the most importance in a medico-legal point of view. Those who have forgotten completely preceeding events will make no statements in relation to these events unless they fully intend to swear falsely and to practice a fraud, and we may hope that the number of persons

who will thus willfully perjure themselves is not large; but the other class of persons may testify honestly, and yet very erroneously, their memory of preceding events being in part correct and part false. There may be just enough truth in their statements to give a color, and to induce the court to accept of the whole without qualification or abatement. Under these circumstances the witness may, unintentionally, put language in the mouth of one which was uttered by another. He may transpose the order of events, or in many other ways deviate from the exact truth, without knowing that he does so. He may even mistake the visions which flit through his mind, while unconscious, for facts; or, what is more likely to happen, he may receive from the conversation of those who are about him, when consciousness is returning, impressions as to what happened before the accident, which will assume the character of convictions, and will be eventually regarded by him as having been recalled by an act of his own memory.

Recently a case has come under my notice which may illustrate the danger of accepting testimony of the class last described.

In the case of Filer against the New York Central R. R. Co., Supreme Court, Monroe County, N. Y., January Circuit for 1873, it was in evidence that Mrs. Filer, in leaving the cars while under motion, at Fort Plain, was caught by her dress, thrown down, and dragged some distance; from which it was claimed she suffered severe and permanent bodily injury. She was conscious after the accident for at least half an hour, and perhaps longer.

Being brought to the stand, Mrs. Filer testified she was instructed by the brakeman to leave the car while it was in motion, thus throwing the responsibility of the act upon the Company; that when she fell, she "gave one terrible scream;" that a gentleman, whom she particularly designated, shouted, "She is killed." * * "Then the bell rang," and from this moment she lost all consciousness until she found herself seated in a chair in the sitting room of the depot.

Her statement that the brakeman told her to step down, as the cars would not stop any more, is contradicted by the brakeman himself; and there are several other points in her testimony, relating to the manner of the accident, which are denied.

The case was tried again, on appeal, in July, 1875. In this last trial I was called to the stand as an expert, particularly in reference to the character of the injuries she received; but incidentally I gave it as my opinion that Mrs. Filer's testimony, ought, under the circumstances, to be received with great caution, although I entertained no doubt but that she testified to what she thought was true.

The jury gave a verdict again for the plaintiff, with increased damages.

In this case there was no evidence that the loss of consciousness was caused by concussion of the brain, or any other bodily injury;

but it appeared to be caused by fright alone. I have no reason, however, to suppose that this fact effects the principle involved, or the rule, if any, exists, governing the memory of preceding events, except as it renders it more probable that the unconsciousness was transient and slight; but the evidence went to show that it was not very transient or incomplete.

It will be observed that, in the brief presentation I have made of this subject, I have done little more than to open the ground for discussion and for future study. Some experience in examining these cases renders it proper, however, for me to suggest to those who undertake to prosecute similar investigations, that they will have to exercise great care in their examinations, rejecting, of course, all who were intoxicated before the receipt of the injury, or who were not sufficiently intelligent or honest to be trusted in their statements, or had not completely recovered their intelligence since the receipt of the injury. The inquisition should be close and critical, even with those who intend to speak the truth, since it will often happen that persons of this class will declare at first that they can recall distinctly the last circumstance preceding the unconsciousness, when in fact they cannot.—*Half-Yearly Compendium*.

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Excision of the Knee and Amputation of the Thigh for Disease of the Knee-Joint.

At the last meeting of the Philadelphia College of Physicians, Dr. John Ashhurst read a most interesting and valuable paper on the above subject. The paper began with the histories of ten cases of excision and five of amputation, all performed by Dr. Ashhurst himself. Excision was performed three times for arthritis with partial ankylosis, twice for arthritis with abscess, once for arthritis following small-pox, and four times for gelatinous arthritis. Nine of these cases have recovered with useful limbs, one however still wearing a splint, as the operation was but recently performed, and the tenth case is convalescent and promises to have as favorable a result as the other nine. Amputation of the thigh was performed in five cases that did not admit of excision on account of the extent of the disease or of visceral complications. One of these cases only proved fatal. This patient was fifty-one years of age, and a man of intemperate habits; and the operation was performed for acute destructive inflammation of the knee-joint following an injury to the leg. In all the other fourteen cases the arthritis was chronic, and the patients were between five and eighteen years of age.

After concluding the account of this remarkable series of cases, Dr. Ashhurst put his remarks in the form of answers to the following questions:

I. When should the surgeon abandon expectant measures in the treatment of knee-joint disease, and what may be considered the indications for a resort to operation?

II. Operative interference having been resolved upon, how shall the surgeon decide between excision and amputation?

III. When an attempt is made to save the limb by excision, how shall the operation be performed, and what shall be the after-treatment?

I. In answer to the first question it must be premised that most cases of inflammation, even of the larger joints, dependent on blows, sprains, or internal causes, are amenable in the early stages to treatment by rest and extension. Unfortunately, however, the case often appears at first so trivial that it is neglected until it is too late for the above treatment to be efficacious. Of the ten cases of excision reported above, in only one had the disease lasted less than one year, the duration ranging in the other cases from one to six years. Dr. Ashhurst does not deny that some of these cases might ultimately have got well without an operation, but the limbs secured by the operation were immeasurably better and more useful than the withered and deformed limbs resulting from the so-called spontaneous cures. In deciding on the propriety of an operation in any particular case, the age and general condition of the patient, and the duration and stage of the affection, must be considered. Excision of the knee is not very successful in children under five years of age; these suffer more from the confinement than older children, and, Dr. Ashhurst thinks, are also more liable to the insidious development of tuberculous and other constitutional diseases. In persons past the prime of life excision of the knee is so fatal, that it should be entirely discarded, and amputation resorted to where an operation is absolutely indicated. The most favorable age for excision is from five years to puberty.

The presence of visceral disease, as a rule, positively contra-indicates excision. An operation is seldom required in recent cases, in which rest, extension, and proper constitutional and local treatment will usually effect a cure. Dr. Ashhurst maintains that these chronic joint affections, though unquestionably local diseases, are not of exclusively local origin, and that they require constitutional as well as local treatment. Finally, no operation should be performed as long as the disease is confined to the synorial membrane, or, even when all the tissues of the joint are involved, as long as the integrity of the part is maintained and a hope of preserving a useful joint remains. "But when the relaxed condition of the joint and the occurrence of consecutive dislocation show that the crucial ligaments and semilunar cartilages have disappeared; when the limb is contracted and helpless, and the patient give a history

of repeated relapses from comparatively slight injuries; or, on the other hand, when the doughy semi-elastic character of the swelling shows the existence of gelatinous arthritis (the typical 'white swelling' of the old writers), an operation may be properly resorted to, even if the limb be at the time in a quiet condition. When in addition the joint is in a state of suppuration, and still more if there be caries of the articular surfaces, an operation may be considered (other things being favorable) as almost imperative." The operation may be performed comparatively early in cases of gelatinous arthritis in which there is hardly any tendency to spontaneous recovery.

II. Amputation should be performed in preference to excision when the patient is too young or too old, when there are visceral complications, when the disease is too extensive to allow of its entire removal without taking away so much bone as would materially impair the usefulness of the limb, and when the question of the time required for recovery is important.

III. In performing the operation of excision, Dr. Ashhurst prefers the transverse incision across the front of the joint, just below the patella. He dissects back the skin and superficial fascia to the level at which he means to use the saw, then cuts directly down to the bone, and removes condyles, patella, and the diseased tissues together. The bones are divided from below upwards by means of a Butcher's saw with blade reversed. The femur, in order to retain the natural inclination of the limb, should be sawn in a plane which as regards the axis of the femur is oblique from behind forwards, and from within outwards. The tibia should be sawn in a plane transverse to its long axis, with a slight anterior obliquity. The epiphyseal junctions should not be interfered with in children; it is sufficient to remove a slice half an inch to an inch thick from the tibia. Any shreds of disorganized tissue may be cut away, but the floor of the wound must be left intact. The patella should always be removed. Tenotomy of the ham-string muscles may be necessary before the limb can be brought into position. Before the patient emerges from the anæsthesia, a posterior splint, bracketed opposite the knee, to allow of daily dressing of the wound, should be applied, and left undisturbed for at least a fortnight, and better still for six weeks, at the end of which time the process of bony union will be well advanced. A straight position is the best for the limb, on account of the shortening produced by the operation.—*Medical Record*.

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ELEPHANTIASIS OF THE NOSE.—Dr. N. Matteucci reports (*Bull. delle Scienze Mediche*) an interesting case of a voluminous elephantiasis of the nose successfully removed by Prof. Rizzoli. Very few cases of this deformity have thus far been observed. Three cases

have been reported by Billroth, one by Gurlt, one by Barilli, and three by Vangel. The individual operated on by Rizolli began to suffer from this disease at the age of forty-three. It commenced with the production of small tumors consecutive to an erysipelas of the face. He objected at first to an operation, and it was only when the deformity had progressed so far as to render him a laughing-stock to everybody, that he consented to its removal. There were a number of tumors, three of which were quite large, the total weight was 280 grammes. The diagnosis was soft fibroma of the derma and subcutaneous connective tissue in a condition of proliferation, with hypertrophy of the sebaceous glands. A perfect cure was obtained.—*Lo Sperimentale*, April, 1876.—*Medical Record*.

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Editorial.

The Medical and Surgical Results of the War.

Through the courtesy of the Surgeon General of the Army and of the Chief Medical Purveyor, Dr. J. H. Baxter, we have recently been made the recipient of three ponderous volumes of medical interest* The publication of the second volume of the Surgical History of the War has been looked for with eagerness by the profession, and no estimate which they could have formed of its importance and worth can, we think, be disappointed.

While in our accurate scientific attainments in Pathological and Physiological Science, we probably do not equal our brethren in the Old World, it will, we think, be readily admitted that in the practical adaptation of what is of value in medical and surgical science American physicians are surpassed by none. In no department of medicine, we think, is this more clearly shown than in the field of surgery, and to-day, in that branch at least, we yield the palm to none. At the outbreak of the war of the rebellion the medical staff of the army was from necessity, largely recruited from physicians whose entire knowledge of medicine was derived from civil practice. They

*The Medical and Surgical History of the War of the Rebellion, Part II, Vol. II, Surgical History. Prepared under the direction of Joseph K. Barnes, M. D., Surgeon General U. S. Army. By George A. Otis, M. D., Asst. Surg. U. S. A. Washington Government Printing Office, 1876.

Statistics, Medical and Anthropological, of the Provost Marshal General's Bureau, derived from Records of the examination for military service in the armies of the United States during the late war of the rebellion of over a million recruits, drafted men, substitutes and enrolled men. Compiled under the direction of the Secretary of War. By J. H. Baxter, A. M., M. D. In two volumes, Washington Government Printing Office, 1876.

were entirely ignorant, many of them, of the demands of army practice, hospital management and discipline, the keeping of accurate records and making reports, transportation of the sick and wounded, the proper treatment of gunshot injuries, army hygiene and the thousand and one important duties devolving upon an army surgeon, were to them at best only matters of theoretical knowledge. Out of this raw material was organized a medical corps whose achievements are the admiration of the world, and which to-day is the model of all civilized governments. The results of their labor and observations have been given to the world in the famous circulars which have from time to time been issued by the Surgeon-General's Office, and in the two preceding volumes of the Medical and Surgical History of the War. The first volume of the surgical portion was devoted to injuries of the head, face, neck, spine and chest, of which details were given of over forty-nine thousand cases.

In the present volume, following the same plan inaugurated in volume first, the account of casualties is arranged in relation to their regional classification. In this volume eight thousand five hundred and thirty-eight cases of wounds of the abdomen are tabulated, and details of six hundred and ten recorded; three thousand one hundred cases of wounds of the pelvis are recorded and six hundred and ten detailed; twelve thousand six hundred and eighty-one cases of flesh wounds of the back are enumerated, and abstracts of two examples are given. Eighty-eight thousand seven hundred and forty-one cases of wounds of the upper extremities are considered, forty-five thousand and eighty-six injuries of soft parts, and thirty-three thousand six hundred and fifty-five cases of shot fractures. Of these detailed abstracts are given of eight hundred and seventeen cases, the principal facts concerning thirty-seven hundred and twelve excisions, and eighty-two hundred and forty-five amputations are concisely recorded in tabular form.

To attempt any critical analysis of this great work would be a task requiring months of careful study and comparison. It has no rival in the world, in surgical literature; its compilation marks an era in scientific progress, in the medical record of our nation, in the professional advancement of the world. We can, as members of the medical profession, as brethren of those whose notes of cases and whose arduous duties are here recorded, record it with no praise which will be too fulsome. To American surgery it is a monument more enduring than granite, to American surgeons a stimulus to still greater perfection in their work.

The two volumes of statistics which have been prepared under the direction of Dr. J. E. Baxter are of great value, as presenting the results of careful and systematic examinations of a large number of men representing every class of society. In order to make the comparison easy of comprehension, the editor has made use of the plan of expressing the given ratios by the relation that one number bears to another. A large number of charts and tab-

ular views are also introduced, showing at a glance the influence of occupation or condition of life upon disease. Maps are drawn and colored to represent the prevalence of various diseases in certain localities. To attempt an analysis of the facts established by this work far beyond the time or space we have at disposal.

The statistician, the philanthropist and the student of public health will find here a vast field of investigation, a treasure-house of facts. Dr. Baxter should be most heartily thanked by the profession and the public for his patient labor in preparing these vast details in so comprehensive a manner, and also for his intelligent and systematic supervision of the Medical Department of the Provost-Marshall-General's Bureau during the war, which made these data attainable, and the present publication a possibility.

These two works, the Medical and Surgical History of the War, and Baxter's Statistics, are a monument to the intelligence and indefatigable zeal of the medical department of the army of the United States during the War. They alone are matters of pride and rejoicing to every member of the profession, and taken in connection with the Army Medical Museum, and the Library of the Surgeon-General's office, both creations of but a few years, we are astounded at the amount of work which has been accomplished.

All honor to Surgeon-General Barnes and his able corps of fellow workers, who have done more than any other body of men, to reflect credit on American medical science.

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The Canadian Medical Association.

We had the pleasure of attending the Ninth Annual Meeting of the Canadian Medical Association, held at Toronto, August 2, 1876, and met with a hearty reception from our Canadian brethren.

The papers read before the Association all evinced a high order of intelligence among the members, and were ably discussed by those present.

The President, Dr. Hodder of Toronto, welcomed the medical men present from the United States in a hearty manner; he alluded to the work which was being done by the Medical Societies upon this side and held their example up as a stimulant to the energies of the Canadian Association. After a few remarks of an introductory character in his address, he dwelt upon the treatment of fibroid tumors of the uterus and somewhat upon the operation of ovariectomy. He alluded to the recent case operated upon by Prof. Thomas of New York, in which the transfusion of milk was employed to sustain the patient, an operation first made by Dr. Hodder, several years ago in a cholera epidemic.

Dr. Joseph Workman, of Toronto, read to the Association a long and interesting address upon the relation of Crime and Insanity. His paper was one of great interest and was written in a strong and able manner. He laid at the door of the press a large share of responsibility for the large number of suicides which are daily occurring. He said that the great demand for something sensational in character for the pages of the daily press led to the publication of the particulars of great crimes and notable suicides, in all their horrible details, which only served to awaken the faculty of imitation which is so strong a feature of many weak minds, leading to increased crime and suicide. He cited instances where the first impulse to commit crime was awakened in the mind of the murderer by reading or hearing of some similar occurrence. The paper was a powerful plea against the present sensational style of writing for the public press.

The discussion upon Dr. Workman's paper was followed by a paper by Dr. Strange, of Aurora, Ont., upon the treatment of the Pedicle in Ovariectomy. We hope to publish this paper in full shortly. In the evening a paper was read by Dr. Rosebrugh upon the Physiology of Menstruation, following which was an extended discussion upon Vital Statistics and Public Hygiene. We were unable to be present at the second day's meeting, but we understand that it was fully equalled in that of the first. Our Canadian brethren have inaugurated a good work in forming an Association, and while they labor under a disadvantage of having and interior not yet developed and supplied with convenient lines of railway, to bring them together, thus being obliged to draw from a frontier extending from Halifax to the lakes, they made up what is lacking in quantity by the excellent quality of their meetings.

The next meeting of the Association will be held in Montreal the second Wednesday in September, Dr. Hingston, of Montreal, President.

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Books Reviewed.

Atlas of Skin Diseases. Part I, Eczema (Erythematosum), Psoriasis, Lupus Erythematosus, Syphiloderma (pustulosum). By Louis A. Duhring, M. D., Professor of Skin Diseases in the University of Pennsylvania. Philadelphia: J. B. Lippincott & Co., 1876. Buffalo: T. Butler & Son.

The appearance of an American Atlas of Skin Diseases is something, we believe, entirely new in the history of American literature. There is no doubt that the difference in climate, food and customs of this country from

the Old World, produces a marked variation in the appearance of the diseases observed here from those seen in Europe, and for this reason the illustrations of skin disease, as seen in the Atlas of Hebra for instance, are not such as would enable a practitioner who had not received special advantages in that line, to recognize the same disease in America. It is a fact which will commend this Atlas to an American reader, that while at the first glance he may be disappointed for the reason that it does not represent the diseases as classically described, he will find that the illustrations are true to life, and represent the ordinary American types of skin diseases.

The illustrations are accompanied by descriptive text which is simple and to the point, the treatment used in each case figured, which are all taken from actual practice, is also given. Dr. Duhring is to be congratulated upon the fine appearance of the initial number of his Atlas. From the high reputation of the author, as a clinical teacher and writer, it can safely be said that the subsequent numbers will full bear out the promise of excellence here put forth.

Specimen Fasciculus of a Catalogue of the National Medical Library. Under the direction of the Surgeon-General, United States Army, at Washington, D. C. Government Printing Office, 1876.

The National Medical Library contains about forty thousand volumes properly so called, and about an equal number of single pamphlets. To make this vast amount of material available, Assistant Surgeon J. S. Billings, in charge of the library, has prepared a catalogue, which is nearly ready for the press. The specimen which is here presented, has been prepared with a view of obtaining advice as to the form best suited to a catalogue of this character.

The specimen fasciculus exhibits the plan proposed and carries the catalogue as far as the letters A-I-R. The titles of monographs are arranged first, coming in the alphabetical order of their authors, for instance, under abdomen (abscess of) we have works by Eydam, Frabicius, Henricus, etc., in order of the alphabet. Following the enumeration of monographs are given the titles of articles in Medical Journals referring to the topic. As an illustration of the character of the work, we will refer to the term Abortion. Under this head are given the titles of one hundred and fifty-three special works, referring to the subject, together with the title and locality of over one hundred and seventy articles in medical journals upon the same topic. A division is also made of this same subject under the head of Jurisprudence of Abortion, under which title seventeen monographs are catalogued, and the titles of seventy-seven articles in medical journals enumerated.

The plan adopted by Dr. Billings, seems to us as perfect as any that can be

suggested. In one portion of the work the names of authors are printed in italics, we think the plan of using small capitals, as employed after the conclusion of the subject abscess, preferable.

It is to be hoped that Congress will soon be made to see the desirability of ordering the catalogue printed. It is estimated than when complete it will make about five volumes of small quarto size, of one thousand pages each.

The Students' Guide to the Practice of Midwifery. By D. Lloyd Roberts, M. D., M. R. C. P., Lond. Philadelphia: Lindsay & Blakiston, 1876. Buffalo: T. Butler & Son.

This work is a manual written for the instruction of students in one of the most important branches in the practice of medicine. It is intended to impart to the young student that practical knowledge which he will need in his professional life. The work opens with a brief sketch of the anatomy of the parts concerned in parturition, following which the physiology of generation is considered. A concise account of the mechanism of labor is given, without a knowledge of which the subject can not be properly understood. The succeeding chapters treat in order placenta previa, signs of pregnancy, diseases of pregnancy, abortion, diseases of the membranes, superfoetation, extra uterine pregnancy, stages of labor, management of natural labor, the puerperal state, obstructed labor, protracted and hasty parturition, accidental hemorrhage, rupture of the uterus, induction of premature labor, version, the forceps, craniotomy, cesarean section, puerperal convulsions, puerperal mania, phlegmasia alba dolens, puerperal fever, thrombosis and embolism, pelvic cellulitis and pelvic peritonitis. The work is illustrated in a suitable manner, the drawings all being well calculated to render the author's meaning more easily comprehended. The discussion of the merely theoretical part of obstetrics is wisely left out of the work, as they would certainly not be suitable to a book of its pretensions, and would only serve to befog the mind of the student.

As a hand book it will be of value to students, and may well occupy the time of practitioners in a careful perusal. Dr. Roberts is an easy writer and evidently speaks largely from personal experience.

Books and Pamphlets Received.

A Treatise on Surgery. Its principles and practice. By T. Holmes, M. A., Cantab. Philadelphia: Henry C. Lea, 1876.

A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M. D., F. R. C. P. Philadelphia: Henry C. Lea, 1876.

A Practical Treatise on Diseases of the Eye. By Robert Brudenell Carter, F. C. S. Edited with additions and Test Types. By John Green, M. D. Philadelphia: Henry C. Lea, 1876.

The Pathology and Treatment of Child-Bed. A Treatise for Physicians and Students. By Dr. F. Winckel. Translated from the second German edition by James R. Chadwick, M. D. Philadelphia: Henry C. Lea, 1876.

Lectures on Fever. Delivered in the Theatre of the Meath Hospital and County of Dublin Infirmary. By William Stokes, M. D., D. C. L., Oxon., F. R. S. Edited by John William Moore, M. D., F. K. Q. C. P. Philadelphia: Henry C. Lea, 1876.

An Introduction to Pathology and Morbid anatomy. By T. Henry Green, M. D., Lond. Second American, from the third English Edition. Philadelphia: Henry C. Lea, 1876.

A Manual of Percussion and Auscultation; of the Physical Diagnosis of Diseases of the Lungs and Heart and Thoracic Aneurism. By Austin Flint, M. D. Philadelphia: Henry C. Lea, 1876.

Theory of Medical Science. By William R. Dunham, M. D. Boston: James Campbell, 1876.

Chirurgie Antiseptique, Principes Modes d'application et Resultats du Pansement de Lister. Par Le Dr. Just Lucas-Championnière. Avec figures dans le texte. Paris Librairie: J. B. Baillière et Fils, 1876.

An Address on some of the Leading Public Health Questions; with remarks on the extent of swamp lands in the United States and their reclamation as a Sanitary Measure. Delivered at the opening of the Third Annual Meeting of the American Public Health Association. By J. M. Toner, M. D., President. Reprint from Vol. II, Public Health Papers. Cambridge: The Riverside Press, 1876.

Chorea. Its Causes and Treatment. By George T. Stevens, M. D. New York: D. Appleton & Co., 1876. Reprint from the transactions of the New York Academy of Medicine.

Proceedings of the Medical Society of the County of Kings, Brooklyn, N. Y., August, 1876.

Transactions of the Medical Society of the District of Columbia. July, 1876.

A Clinical lecture on the Treatment of Incipient Stricture, by Otis's Operation. By Mr. Berkley Hill, together with explanatory remarks on the Treatment of Stricture and Gleet. By Fessenden A. Otis, M. D. From the "Lancet" of April 8th and June 3d and 10th, 1876.

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Original Communications.

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ART. I.—*The Treatment of the Pedicle in Ovariectomy.* A paper read before the Canadian Medical Association at Toronto, Ont., August 2d, 1876. By FREDERICK W. STRANGE, M. R. C. S. Eng., Fellow Obstetrical Society, London.

MR. PRESIDENT AND GENTLEMEN:—In view of the fact that the operation of ovariectomy is now recognized by all Surgeons as not only a justifiable operation in suitable cases, but absolutely imperative for prolonging to the natural period the life of the unfortunate sufferer from ovarian disease, and as the treatment of the pedicle is the only point of difference existing in the mode of operation in the hands of different surgeons, I have ventured to bring before your notice a brief comparative synopsis of the various methods employed in treating the pedicle after the tumor has been removed.

For the sake of brevity I shall divide the various forms of treatment into two classes, the first embracing the modes of treatment by leaving the extremity of the pedicle outside of the abdominal walls; the second embracing the modes of treatment when the pedicle is returned into the pelvic cavity.

In the first class, the pedicle may be secured outside the abdomi-

nal walls by Spencer Wells' clamp, by callipers of various forms, or by transfixing the end of the pedicle with a needle, which by being passed through the lower parts of the abdominal incision and transfixing the pedicle between the walls, does the double duty of preventing the return of the pedicle, and at the same time closing the lower part of the abdominal incision.

The rationale of these plans is the same whatever method is employed, viz: the arrest of hemorrhage from the pedicle by pressure, and the prevention of its return within the abdomen.

This mode of treatment possesses great advantages in those cases in which the pedicle is long and the vessels of the pedicle large, since it insures all safety, so far as the pedicle is concerned, against internal hemorrhage and suppuration; but it labors under the disadvantage that when the pedicle is short it is difficult of application, it pulls the uterus out of place, it disturbs the pelvic organs, and frequently gives rise subsequently to uncomfortable dragging sensations in the lower portion of the abdomen and in the pelvis.

The second class of treatment in which the pedicle is returned into the pelvic cavity obviates these objections, but is more prone to the dangers of internal hemorrhage and suppuration. Cases imperatively demanding this method are those in which the pedicle is very short, and where the ovarian tumor is almost sessile, so to speak, to the uterus. The plan adopted by some surgeons in these cases, is to secure the pedicle by transfixing it with a strong silk or hempen ligature, or by silver wire, tying both halves tightly, cutting the ends off short, closing up the abdominal incision, and trusting to Providence that the ligature or wire may do no harm. The risks in this case are, first, that the ligature or wire may slip or become untied and fatal hemorrhage ensue; and secondly, that danger having been escaped, that their presence may excite inflammatory action; and thirdly, that the disintegration and sloughing of the constricted end of the pedicle may cause a collection of pus for which there is no egress.

Another plan of internal treatment is to secure the end of the pedicle by a strong ligature of silk hemp, or whipcord, and allow the end of the ligature to escape through the lower part of the abdominal incision. This plan is open to most of the objections

just enumerated, but is a decided advance in treatment in this respect, that in case of internal collections of pus and debris from the extremity of the pedicle, the ligature serves as a guide for its discharge externally. The principal objection is that in some cases recovery is greatly retarded on account of the ligature remaining firmly attached to the pedicle for weeks or even months. This persistence is, I believe, due to the fact of too much tissue having been taken up by the ligatures or by their not having been drawn sufficiently tight. Time however ultimately triumphs, and the ligatures come away, but not before having caused considerable annoyance and delay, especially to those patients who have left their homes to be near their surgeons.

There remains another method which, I believe, will ultimately be adopted by surgeons as the safest, most rational, and at the same time the neatest way of treating the pedicle. I allude to the division by means of the actual cautery for which the profession is indebted to the late Mr. Baker Brown. As I have not met with the records of any case of ovariectomy performed in Canada, in which the pedicle was treated in this manner, I will briefly describe its application. As soon as the tumor has been brought fairly outside the abdominal incision, a clamp, which I shall have much pleasure in exhibiting in a few minutes, is applied to the pedicle. A cautery iron *heated just short of white heat*, is pressed backwards and forwards against the pedicle until it *gradually burns its way* through its thickness. The clamp is then removed *gradually*, care being taken to see that no hemorrhage occurs on its removal, and the pedicle is allowed to slip back into the pelvic cavity, and the abdominal incision is then closed.

The extremity of the pedicle when treated in this manner, shows no evidence of having been cauterized beyond a fine eschar which looks like a hair; there is no irritating ligature or wire to give rise to inflammatory action; there is no strangled extremity to slough and cause suppuration; while in more than one hundred cases actual experience has shown that there is not the least fear of secondary hemorrhage. If hemorrhage occurs at all, it will take place immediately the clamp is removed and while the pedicle still remains outside the abdomen, and if it does take place then, which

is of very rare occurrence, it can be immediately arrested by a ligature.

Statistics are proving that the rate of mortality by this treatment is less than by any other. Of fifty consecutive cases treated in this way by the late Mr. Baker Brown, forty-five recovered, bringing the rate of mortality to *ten per cent.* More recently, Mr. Alexander Keith, of Edinburgh, has excelled even this brilliant record, having had forty-six recoveries out of fifty consecutive cases treated in this manner, thus bringing the rate of mortality down to *eight per cent.* Supported by this splendid success and backed by my own experience both during my own association with the late Mr. Baker Brown, and since his demise, I have every confidence in bringing the treatment of the pedicle by actual cautery under your notice to-day, and most heartily recommending its adoption by all ovariectomists in this country, recommended as it is by such distinguished surgeons as the late Mr. Baker Brown, Mr. Alexander Keith, and the late Dr. Tanner of London, England. The latter lamented gentleman in his "Practice of Medicine," 5th edition, published in 1865, says, when speaking on this subject, Mr. Baker Brown has recently resorted to the use of the actual cautery; and I cannot but think that if this plan works well on further repetition it will supersede all others.

Of the five unsuccessful cases in Mr. Baker Brown's series, I have the notes of the operation, and post mortem examinations of three which proved fatal in the London Surgical Home for women.

CASE No. 1. M. R., aet 25, unmarried. Catamenia always regular. Her health had been perfectly good until three years ago when pain in the left side first was felt. Swelling has only been noticed for the last seven months. Seven weeks before admission the tumor was tapped, but rapidly refilled. In February 1865, under chloroform, an incision was made disclosing several adhesions between the peritoneum and the front and sides of the tumor, which were divided by actual cautery. The tumor was then tapped and sixteen pints of fluid removed, when it was found to be further adherent to the left iliac crest, to several inches of the sigmoid flexure, to the meso-rectum, and bladder. These ad-

nesions were divided by actual cautery as far as practicable, and in all twelve patches were seared. One bleeding vessel, however, deep down between the uterus and rectum which could not be reached either by actual cautery or for the purpose of ligature, was suffered to remain patent, partly in consequence of the severe loss of blood already undergone and the consequent exhausted state of the patient, and partly because it had ceased to bleed before the operation was completed. The pedicle having been also divided by actual cautery was then returned to the pelvic cavity and the wound closed by silver sutures. The patient died twenty seven hours after the operation, exhibiting symptoms of internal hemorrhage during the last five hours. On careful post mortem examination, the pelvis was found to contain about a pint of nearly pure blood, the source of which was traced to the site of adhesion to the meso-rectum, to which it was impracticable to apply the hot iron. Signs of commencing peritonitis were also present. As this was the first case in which we had an opportunity of making a post mortem examination after the pedicle and adhesions had been divided by actual cautery, it is of great practical importance to observe that no one spot so divided had given way, but that the hemorrhage was entirely from the spot not cauterized.

CASE No. 2. A. M., aet 45, single. A needlewoman, who, to use her own words, "had to spend more money on lodgings than food, as she could get no work unless she lived in respectable lodgings." Swelling in abdomen first noticed two and a half years ago. Catamenia regular. On March 16th, 1865, under chloroform, a primary incision of five inches was made. The adhesions were few and easily broken. Ten pints of fluid having been drawn off, the tumor was withdrawn and the pedicle divided by actual cautery, and the wound closed. A low form of peritonitis set in forty-eight hours after operation which speedily carried her off, ninety hours after the removal of the tumor. On post mortem examination a very imperfect attempt at union of the lower part of the incision was found. Intestines were inflated with gas, and matted together by recent lymph. A few ounces of serum were in the abdominal cavity, *but the seared pedicle was perfectly free from any symptom of secondary hemorrhage.* The heart was hypertro-

phied, the aortic valves thickened and puckered; other organs healthy.

CASE No. 3. M. H., æt 55, married. Has ceased to menstruate for four years. Eighteen months ago first noticed an enlargement in abdomen. Chloroform was administered July 19th, 1866, and an incision of six inches made. No adhesions were found anteriorly, but four pints of fluid, opaque and milky, were evacuated from the abdominal cavity. The tumor was extracted, and a small adhesion of the omentum exposed. This was separated, and the clamp applied to the pedicle, *but through failure of the cautery two large arteries were tied by twine ligature.* There was cystic disease of the omentum, two large layers of which were separated and formed a cavity containing transparent fluid which was evacuated. Low peritonitis ensued to which the patient succumbed the sixth day after operation. The post mortem examination revealed lack of union in the incision, general peritonitis with yellowish lymph, and universal slight adhesions. *No blood had escaped from the seared surface of the pedicle which was not included in the ligature.*

These cases, sir, are to me most satisfactory evidence of the value of the actual cautery in treating the pedicle, and when to these, one adds the large proportion of recoveries from operation after this method, I think I may safely commend it to my brother surgeons. In conclusion, sir, allow me to suggest to the profession that it would be even an advance on this treatment if we could show that the galvanic cautery could be safely substituted for the actual cautery.

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ART. II.—*Malignant Disease of the Tonsil; Removal by Galvano-Cautery.* By Prof. J. F. MINER, M. D. Reported by E. N. BRUSH, M. D.

On the second of July last, Mr. B. of Nunda, N. Y., came to consult Dr. Miner in reference to an enlargement of his right tonsil, which seriously interfered with both respiration and deglutition, and was also producing considerable annoyance from the amount of pain which it produced. The patient, a man of about

sixty-three years, presented an anxious, cachectic appearance, and though of an apparently sturdy constitution, he now looked ill and worn out. An examination of the throat revealed a tumor springing from the seat of the right tonsil and almost filling the entire throat. It was nodulated in appearance, soft, and bled on slight manipulation. The discharge from the surface was not very profuse, but had a disagreeable odor. The glands in the neck on the corresponding side, were enlarged. The tumor in the throat had been of somewhat rapid growth, the exact duration of which was not, however, at the time, noted. No family history of cancer was elicited.

The diagnosis made was encephaloid disease of the tonsil, and after carefully weighing the dangers, of the operation, its removal was advised, not with the idea of a permanent cure, but for the purpose of affording temporary relief, which was all that Mr. B. expected. The following day, July 3d, was fixed for the operation.

Operation. Dr. W. W. Miner, having induced anæsthesia by ether, the operation was commenced, with the assistance of Dr. W. W. Miner, the writer, Messrs. Hopkins and Parker, private students of Prof. Miner's. An attempt was first made to pass the wire loop of the galvano-cautery apparatus about the base of the tumor, but owing to the shape of the growth and its situation, this was found impossible. The platinum knife was next heated red hot, and the larger portion of the tumor shaved off with it. It was found impossible, without injury to the surrounding tissues, to remove the entire tumor in this manner, and resource was had to a pair of long curved scissors, by which all remaining fragments of the tumor were removed. The hemorrhage from the cut surface, which was quite free, was easily controlled by the dome cauteriser heated by the battery. The surface left, after the removal of the tumor and application of the cantery, had a smooth, even feeling, and was evidently in good condition for whatever reparative attempt nature might make. The enlarged glands in the neck were removed by the knife.

On the 15th of September, Mr. B. again presented himself for examination and advice. The tumor in the throat had not again made its appearance, but the site of the original growth had an un-

healthy look. In the neck the glands had enlarged, and at the site of those removed a tumor had attained the size of an English walnut. No operative procedure was advised, the object of the original operation having been attained, viz :—removal of the obstruction to deglutition and respiration.

Malignant disease of the tonsil is not of very frequent occurrence. There is nothing, however, in this case, which warrants a report of its details, except the facility with which the tonsil was removed. The risks attending an operation of this character, and upon which some surgeons have laid considerable stress, have, heretofore, been in the danger of uncontrollable hemorrhage, but surgeons now have at their command an apparatus by which the actual cautery can be applied with ease, precision, and at a moments notice, and by the employment of the galvano-cautery the danger surrounding this operation is in a great measure removed. The instrument used in this instance was what is known as the Byrne battery. It seems to possess all the advantages of the larger batteries, and one other which they do not, namely, portability, occupying as it does less space than an ordinary amputating case.

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Proceedings of Medical Societies.

THE INTERNATIONAL MEDICAL CONGRESS.

The Congress was opened on Monday, Sept. 4th, at twelve o'clock, by Prof. Samuel D. Gross, M. D., LL. D., D. C. L., Oxon. After prayer by the Right Rev. Wm. Bacon Stevens, Bishop of Pennsylvania, Prof. Gross delivered an address of welcome, which we are happy to be able to give in full, as follows:

“My colleagues have confided to me, as the President of the Centennial Medical Commission, the agreeable and honorable duty of opening this International Medical Congress, so long the object of their solicitude and earnest labor. In their name, then, as well as my own and that of the entire medical profession, whose great heart this day throbs in unison with ours, I extend to you our

right hand, and bid you a thrice cordial welcome to the City of Brotherly Love. The occasion which has brought us together this morning is one of no ordinary kind; it is one also which has been long and, I may say anxiously anticipated. I might, perhaps, seem ungracious if I were to tell you how much time and labor have been bestowed by the commission through its Committee of Arrangements upon the organization of the Congress; how often they met to devise plans and to interchange views; how earnestly and thoughtfully they performed their work; in a word, how faithful and conscientiously they discharged the great trust confided to them by the different medical bodies of the city and county of Philadelphia, in which the Congress originated nearly two years ago. Not a little embarrassment often attended their progress, and it was, therefore, not without a profound sense of relief, such as a weary traveller may be supposed to experience at the end of a long and tedious journey, when we found that our task was finally brought to a successful close. If the organization is less complete than to some of you it may seem to be, no blame will, I am sure, be ascribed to the commission on account of any shortcomings. There might, possibly, have been wiser and more experienced heads at work; but warmer hearts, or more conscientious men never were, I venture to affirm, engaged in a noble enterprise. Such, then, as the work is, we cordially submit it to your consideration, satisfied that it will be accepted by you in the same kindly spirit in which it is tendered, and that any deficiencies that may mar its character may be duly rectified by your superior wisdom.

It is at all times a source of gratification to welcome friends, especially when they are united by the bond of a common brotherhood, or an identity of interests; but on this occasion, so pregnant with important events, the feeling is vastly heightened by the fact that we have assembled around us brethren not only from every section of this great continent, but from various foreign climes—from Europe, the far East, from Japan and China, the islands of the Pacific, South America, Mexico, and the West Indies, and, I had almost said, from every country in the world. The invitations sent out by the commission cover every prominent medical society and every distinguished medical man in the four quarters of the globe. The object was to bring together representative men from all nationalities to participate in our proceedings, and to afford us the benefit of their wisdom, and the results of their experience and scientific investigations. If all these, or even a respectable minority of these representative men could have been here, what a glorious spectacle would be presented in this hall this morning! Men laying aside for a while their ordinary pursuits, crossing vast continents and perilous seas, congregating to unite with us in celebrating our first Medical Centennial, in interchanging cordial salutations, in deliberating upon the best means of promoting the holiest and dearest interests of our profession, and in laying their con-

tributions—the accumulations of years of study and observation—upon a common altar for the common good! In its wide range, the present Congress is without a parallel. Similar bodies have repeatedly met, but none on so grand a scale or with such a cosmopolitan outlook.

In organizing the Congress the commission may have been guilty of undue partiality towards their own country. Perhaps such a tendency was, after all, natural. However this may be, certain members had an irresistible desire to show the world what the century, since the establishment of our independence as a free and sovereign people, has accomplished for scientific medicine. For this purpose topics illustrative of the progress and present condition of the different branches of medicine in the United States have been assigned to gentlemen of acknowledged rank in the profession in different sections of the Union. These exercises will, it is believed, add greatly to the interest of the occasion. Time was when we had no medical literature—no medical science—when we were utterly helpless, and wholly dependent upon the aid derived from our European brethren, especially the English, whose language, practice, and habits we made our own. The poverty of the country in these respects cannot be better illustrated than by the fact that we had no native works on medicine and the collateral sciences until after the commencement of the present century. Many of you will recall the words of the great English lexicographer who, in 1769, in speaking of the American colonies, exclaimed, ‘Sir, they are a race of convicts, and ought to be thankful for anything we allow them short of hanging.’ The Abbe Raynal, writing in the latter part of the last century, declared that America had not produced a single man of genius; and the exclamation of a celebrated Scotch reviewer, uttered at a more recent period, ‘Who reads an American book, who goes to an American play, or who looks at an American picture?’ is still fresh in the memory of many of the present race of men. The discourses which will be delivered before you on the progress of American medicine will serve to show that the profession of the United States has earned for itself an enviable reputation, and that it is fully abreast with all the other pursuits that adorn the human mind and shed luster upon the scientific character of the nation. They will serve to show that we have passed the period of medical provincialism, and that we stand upon a lofty platform, to which we need not be ashamed to invite the representative men of the profession of foreign countries, however illustrious, or however far advanced in the arts of civilization.

The different sections, organized by the commission, must speak for themselves. It is in them that the work of the Congress is mainly to be done, where the interchange of scientific ideas is to be effected, and from which the meeting is to derive its chief glory as an international body of scientific and enlightened men.

It will be recollected that attempts have been made at different times to establish uniformity of scientific nomenclature, weights, measures, and records of disease, for the medical profession in all parts of the civilized world. The plan, if carried out, cannot fail to advance in an eminent degree, the interests of medical science; and I am happy to state that it is proposed to discuss the subject fully in one of the sections.

We are upon the threshold of a new century. One hundred years have passed away since the grand old bell upon Independence Hall announced to the world the birth of a new nation, and liberty not only to our own citizens but to all the nations of the earth. The new century that has just elapsed was the most wonderful in all that pertains to human progress, to discovery, to invention, to improvement, to refinement and intellectual culture; in a word, to all that ennobles and exalts human nature in its various aspects and phases, that has been vouchsafed to man since God said, 'Let there be light.' The science of medicine has been completely revolutionized within our own day. The saying, 'Old things have passed away, behold all things are new,' has literally been fulfilled. The microscope, chemical analysis, clinical observation, and experiments upon the inferior animals, are leading on the medical mind with wondrous velocity in the pursuit of knowledge, and adding daily new facts to our stock of information far beyond what the wildest fancy could have conceived of even a third of a century ago. Dogmatism, once so dominant in the schools, has ceased to exist, and no unacknowledged theories are any longer received by the scientist. Facts, resting upon the broad basis of observation and experiment, repeated and varied in a thousand ways, alone, are relied upon as worthy of acceptance and as safe guides in practice. Hippocratic medicine is the order of the day. Everything bows before its divine behests.

In every corner of the habitable globe, penetrated by the light of civilization, busy, active minds, endowed with high culture, and actuated by the noblest resolves, are at work, exploring the mysteries of disease, and devising means or methods of treatment, for the relief of suffering, and the prolongation of life. The busy bee was never more industriously engaged in gathering honey from the flower of the field than the modern physician is in gathering knowledge at the bedside of the sick, and garnering it for future use. Much of what is considered by many as established must be reviewed in the light of modern science; new avenues must be opened, and the ball, composed of myriads of threads more delicately formed than any ever spun by Penelope, must be pushed onward and upward by the united efforts of the medical profession in all parts of the world. How far the Centennial International Congress shall promote these desirable objects time alone can determine. It may safely be predicted that, if it do not fulfil all the promises of hope that have been formed of it, it will accomplish a

vast deal of useful work, and thus afford the world an earnest of its interests in the advancement of scientific medicine and in international unity. Science can have no higher mission than that of strengthening the bonds and securing the co-operation of its votaries in various parts of the globe, assembled to deliberate upon everything calculated to promote its holiest interests.

Among the many objects of an International Congress, not the least is the interchange of kindly feelings on the part of its members, the formation of new friendships and the cementing of old ties. It is well that men of different nationalities should occasionally come together, to look at one another, and to see how they stand in public estimation, as well as their own; what the world thinks of them, and what they think of the world; what they have done to further the interests of scientific progress, to lighten the burdens of human suffering, and to extend the boundaries of human happiness. All these and many other things which need not to be here specified, are objects well calculated to engage attention on such occasion.

It need hardly be added that the medical profession and the citizens of Philadelphia will do all they can to make your time pass pleasantly, as well as profitable, during your sojourn among us. Cards of invitation will be issued to you to inspect the various institutions of interest in and around the city; and, after the work of the Congress is over, the International Exposition will no doubt claim, as it assuredly deserves, the earnest attention of every member of this body. And now that the labor of the Centennial Medical Commission is complete, it only remains for the Congress, which I now declare open, to perfect its organization by the election of its own officers.

It has often occurred to me that if these international reunions were more frequent and more largely attended, they would be a vast deal more serviceable in preventing wars and international misunderstandings than any arbitrations that could be inaugurated for the settlement of international difficulties. Much of the pleasant feeling at present existing between the United States and Europe is due to the enlarged intercourse which has been going on since the invention of steam navigation between the peoples of those countries, and the consequent interchange of hospitality and courtesy between the two countries. I hope, therefore, that this may be only one of the many such reunions on this side of the Atlantic.

The Chair then announced the following committee on nomination, to select officers for the Congress:

Mr. William Adams, London; Prof. Engelsted, of Copenhagen; Prof. Hüter, of Greifswald; Prof. Rudnew, of St. Petersburg; Dr. J. A. Grant, of Ottawa, Canada; Dr. Henry I. Bowditch, of Boston; Prof. L. A. Dugas, of Augusta, Georgia; Prof. J. T. Hodgen,

of St. Louis; Prof. Christopher Johnston, of Baltimore; Prof. Austin Flint, Sr., of New York; Dr. W. S. W. Ruschenberger, U. S. Navy; Dr. Joseph R. Smith, U. S. Army; Dr. Edwin M. Snow, of Providence, R. I.

While the nominating committee were consulting, Prof. Austin Flint, of New York was introduced, and gave the address on medicine, of which the following is an abstract:

He alluded to the influence exercised by the medical men of the Revolutionary period, to the commencement at that early date of a medical literature, and to the formation of medical schools. The war, which called forth the medical energies of the colonies, for a time, arrested the progress of medical schools and medical teaching, but it resulted in the development of a body of medical men who had added to the theoretical a vast amount of that which was practical, obtained in army practice.

The dominant medical minds were in New York, Philadelphia and Boston. In Philadelphia the Philadelphia Medical College was founded, Franklin being one of its most active promoters. In 1791 this school was merged into the Medical Department of the University of Pennsylvania, which was formed after the model of the school of Edinburgh. Philadelphia inaugurated medical teaching in America, she was then and has been since the medical centre. The teachers in the Philadelphia school were all graduates of Edinburgh, and very naturally clung to the views they had received there.

The views of Cullen were generally adopted, and for a time prevailed, especially in Hospital practice. His works had been edited by Rush, at that time the leading medical man in America. Cullen's system was followed by others, each prominent lecturer or writer seeking to evolve some system which should embrace the whole science of medicine, this era, in fact, may be styled that of medical systems.

At the close of the first quarter of the nineteenth century, there were more than twenty medical schools in the United States, six of these were in New York, Philadelphia and Boston, the balance were provincial, these latter supplied the place of the more expensive and distant colleges to students who could not afford the expense of city tuition, they developed study and inquiry among

physicians in their vicinity, and trained many of the teachers in the metropolitan schools. There were at this time twenty Medical Journals. The important agencies in the growth of medicine were the views of Cullen, the pathologist of greatest strength at close of the last century, following whom was Rush, Good and Brown, the latter of Edinburgh, the opponent of Cullen. In 1801 Seaman, of New York, began to vaccinate; in 1817 the Pharmacopœia of 1820 was projected; in 1846 anæsthetics were first used in Boston.

The appearance of American translations of foreign works and the publication of Horner's work upon pathological anatomy, of a later of one by Gross upon the same subject, were mentioned as adjuncts to the advance of medicine in America.

The introduction of auscultation and percussion in diagnosis of diseases of the heart and lungs, the publication of the works of André, Hope, Stokes, and the writings of Holmes, James Jackson, Bowditch and Gerhard were alluded to. The Clinical reports of Dr. Bright, and the advance of diagnosis of diseases of the kidneys, to which they gave rise, were alluded to.

In 1828, the *American Journal of the Medical Sciences* was first issued, its work in medical literature was highly spoken of. Brunsaisism was the last of the "isims," it was succeeded by the "pathies" of to-day. The works of John Estlin Cook, who believed that congestion of the liver was the foundation of all disease, were next mentioned, the heroic doses of calomel administered in his day were illustrated by an amusing story of a farmer who imagined he had discovered a mine of quicksilver, but was disappointed to find that the metallic mercury which he had found was on the burial lot of a number of patients treated by mercury.

The self-limited nature of disease as advocated by Bigelow in his work, produced a change in the treatment of diseases, polypharmacy and heroic doses fell into disuse, physicians began now to doubt their powers of *curing* diseases and began to watch and endeavor to assist nature.

The characteristics of the last quarter of the century were stated to be increased attention to histology and pathology, the influence of German medical literature, and the increasing tendency

to go abroad to study medicine. After a brief reference to the advantages to be gained by an international copyright law, to the advanced position of our medical literature, Dr. Flint said the chief characteristic of our medical schools is their practical teaching. He dwelt, in conclusion, upon the Code of Ethics and its value, and to the elevated social and public position of the profession in this country.

DR. GROSS called attention to the fact that Dr. Flint had with great modesty omitted all mention of his own contributions to medical science.

On motion of Dr. James P. White a vote of thanks was tendered to Drs. Gross and Flint, and copies of their addresses asked for publication.

The Committee on Nominations then reported the following names for officers of the Congress:

President: Professor Samuel D. Gross.

Vice-Presidents: Prof. Paul F. Eve, of Tennessee; Mr. Joliffe Tuffnell, of Ireland; Drs. W. L. Atlee, of Pennsylvania; C. Lange, of Denmark; J. B. Johnson, of Missouri; F. Semeleder, of Austria; Dr. Hunter McGuire, of Virginia; Dr. Johan Hjort, of Norway; Dr. T. G. Richardson, of Louisiana; Dr. Wm. H. Hingston, of Canada; Prof. J. P. White, of New York; Dr. H. Miyake, of Japan; Prof. Nathan R. Smith, of Maryland; Prof. Rudnew, of Russia; Dr. Joseph M. Toner, of Washington; Prof. Hueter, of Pomerania; Dr. G. L. Collins, of Rhode Island; Dr. R. F. Hudson, of Australia; Dr. Henry Gibbons, of California; Dr. P. Debasieux, of Belgium; Dr. N. S. Davis, of Illinois; Mr. William Adams, of England; Dr. L. Dugas, of Georgia; Prof. A. R. Simpson, of Scotland; Dr. J. K. Bartlett, of Wisconsin.

Honorary Vice-Presidents: Surgeon-General J. K. Barnes, U. S. Army; Surgeon-General Joseph Beale, U. S. Navy.

Treasurer: Dr. Caspar Wistar, of Pennsylvania.

Secretary General: Dr. I. Minis Hays, of Pennsylvania.

Secretaries of Meetings: Drs. W. B. Atkinson, Richard J. Duglison, R. A. Cleemann, W. W. Keen, R. M. Bertolet.

OFFICERS OF SECTIONS. MEDICINE. *Chairman.*—Alfred Stillé, M. D., Philadelphia; *Vice-Chairmen.*—R. P. Howard, M. D., Canada; J. J. Woodward, M. D., U. S. A.; *Secretary.*—J. Ewing Mears, M. D., Philadelphia.

BIOLOGY. *Chairman.*—John C. Dalton, M. D., New York; *Vice-Chairmen.*—Austin Flint, Jr., M. D., New York; F. W. Campbell, M. D., Canada; *Secretary.*—James Tyson, M. D., Philadelphia.

SURGERY. *Chairman.*—Prof. Joseph Lister, Edinburgh; *Vice-Chairmen.*—J. A. Grant, M. D., Canada; John Ashhurst, Jr., M. D., Philadelphia; *Secretary.*—John H. Packard, M. D., Philadelphia.

DERMATOLOGY AND SYPHILOLOGY. *Chairman.*—James C. White, M. D., Boston; *Vice-Chairmen.*—S. Engelsted, M. D., Copenhagen; Edward Shippen, M. D., U. S. N.; *Secretary.*—A. Van Harlingen, M. D., Philadelphia.

OBSTETRICS. *Chairman.*—Robert Barnes, M. D., London; *Vice-Chairmen.*—Prof. Alex. R. Simpson, Edinburgh; W. H. Byford, M. D., Illinois; *Secretary.*—William Goodell, M. D., Philadelphia.

OPHTHALMOLOGY. *Chairman.*—R. Brudenell Carter, F.R.C.S., London; *Vice-Chairmen.*—Wm. Thompson, M. D., Philadelphia; Henry W. Williams, M. D., Boston; *Secretary.*—John Green, M. D., St. Louis.

OTOLOGY. *Chairman.*—Clarence J. Blake, M. D., Boston; *Vice-Chairman.*—A. H. Buck, M. D., New York; *Secretary.*—H. N. Spencer, M. D., St. Louis.

SANITARY SCIENCE. *Chairman.*—Stephen Smith, M. D., New York; *Vice-Chairman.*—J. S. Billings, M. D., U. S. A.; *Secretary.*—E. M. Hunt, M. D., New Jersey.

MENTAL DISEASES. *Chairman.*—John P. Gray, M. D., New York; *Vice-Chairmen.*—E. Grissom, M. D., North Carolina; I. Ray, M. D., Philadelphia; *Secretary.*—Walter Kempster, M. D., Wisconsin.

COMMITTEE ON PUBLICATION, WITH POWER TO SELECT CHAIRMAN AND EDITOR. John Ashhurst, Jr., M. D., Philadelphia; R. J. Dunglison, M. D., Philadelphia; Wm. Goodell, M. D., Philadelphia; James H. Hutchinson, M. D., Philadelphia; Caspar Wister, M. D., Philadelphia.

The Congress then adjourned.

At two, P. M., a public luncheon was served to the members of the Congress, in the basement of the University, and at three, P. M., the sections assembled for work. In most of the sections we can only give the title of the papers read. They were as follows:

In Section I. **MEDICINE.**—Typho-malarial Fever; is it a Special Type of Fever? Reporter, J. J. Woodward, M. D., Surgeon U. S. Army; in Section II. **BIOLOGY.**—Microscopy of the Blood. Reporter, Christopher Johnston, M. D., Professor of Surgery in the University of Maryland; in Section III. **SURGERY.**—Antiseptic Surgery. Reporter, John T. Hodgen, M. D., Professor of Surgical Anatomy and Clinical Surgery in the St. Louis Medical College.

His conclusions may be classed under the following four heads:

I. Putrefaction may and does occur in the solids and liquids of

the body both with and without the direct contact of germs borne in the air or water.

II. Putrefaction of the solids and liquids of an open wound may in many cases be prevented if the contact of living germs with the surface is not permitted, or by destroying their vitality after contact with it.

III. It is possible that the living solids and liquids of the body may be so altered that they shall not furnish the conditions necessary to putrefaction.

IV. Practically the conditions to be met in preventing putrefaction are so difficult that in many cases it is impossible to comply with them. Yet, even partial success is eminently worthy of our best efforts.

This paper, into the details of which we cannot go at the present, was discussed by Dr. Hewson of Philadelphia, who some time since brought forward the subject of earth dressing, Drs. Hamilton and Weir of New York, Dr. Caniff of Toronto and Prof. Lister of Edinburgh.

In Section IV, Dermatology and Syphilology, the paper was upon Variations in Type and in Prevalence of Diseases of the Skin in Different Countries of Equal Civilization. Reporter, James C. White, M. D., Professor of Dermatology in Harvard University.

The programme in the remaining sections was as follows:

In Section V, Obstetrics, the Causes and the Treatment of Non-puerperal Hemorrhages of the Womb. Reporter, William H. Byford, M. D., Professor of Obstetrics and Diseases of Women in the Chicago Medical College; in Section VI, Ophthalmology, the Comparative Value of Caustics and Astringents in the Treatment of Diseases of the Conjunctiva, and the best mode of applying them. Reporter, Henry W. Williams, M. D., Professor of Ophthalmology in Harvard University; in Section VII, Otology, Importance of Treatment of Aural Diseases in their early Stages, especially when arising from the Exanthemata. Reporter, Albert H. Buck, M. D., of New York; in Section VIII, Sanitary Science, the Present Condition of the Evidence concerning "Disease-germs." Reporter, Thomas E. Satterthwaite, M. D., of New York; in Section IX, Mental Diseases, the Microscopical Study of the Brain. Reporter, Walter H. Kempster, M. D., Physician and Superintendent of Northern Hospital for Insane, Oshkosh, Wisconsin.

In the evening a reception was given to the members of the Congress and their ladies, by the Medical Profession of Philadelphia, in the Judges' Hall, Exhibition grounds. At its conclusion a supper was served in the LaFayette restaurant in the grounds.

Gov. Hartranft and Gen. Hawley, President of the Centennial Commission, were present at the reception.

The Congress met at ten o'clock on Tuesday morning in the Chapel of the University, the President, Prof. Gross, in the chair. After the reading of the minutes, the report from the sections were received, and after some discussion as to the propriety of endorsing their conclusions, they were at last merely referred for publication. Letters of congratulation were read from the St. Petersburg Medical Society and the University of Christiania, Norway. Resolutions were offered by Prof. Flint and adopted by the Congress complimentary to the Surgeon General and staff, and recommending that the U. S. Congress be appealed to for encouragement of the work and the publication of a Catalogue of the National Medical Library. The Committee on Nominations made an additional report, which is comprised in the list of officers in the first day. Dr. Eve, Vice-President, was called to the chair, and Dr. H. I. Bowditch read the address on Hygiene and Preventive Medicine. He divided the past one hundred years into three portions, the era of theory and systems, the age of strict observation and recording of facts, and the period embraced in the last few years, 1869-76, the period in which State Medicine and Hygiene were in the advance.

To determine the present condition of sanitary progress, Dr. Bowditch sent inquiries to one hundred and sixty-seven men of intelligence, living in thirty-eight States and nine Territories, covering twenty-five degrees of latitude and forty-seven degrees of longitude, and occupying every phase of climate. Some of these replies, arranged according to States, may be briefly given:

Does the State duly appreciate and care for the health of the people? 34 nays, 8 yeas.

Is the State willing to spend money to establish a State Board for various beneficent purposes cited? 36 nays, 10 yeas. In some States these boards are established, but no money is appropriated.

Is the State willing to spend money for investigation of preventable causes of disease? 30 nays, 12 yeas. In Massachusetts ten thousand dollars were appropriated last year to check the pollution of streams.

Is the State willing to spend money for the prevention of noxious trades? 26 nays, 14 yeas. Brighton, Mass., once the center of numerous offensive slaughter-houses, is now a beautiful and fashionable spot, since these were got rid of.

Is the State willing to take measures to prevent the adulteration of food? 23 nays, 16 yeas.

Has the State any Board of Health? has it a properly organized set of correspondents? No perfect set exists in any State. There are twelve State Boards of Health altogether.

Has the State a law for the registration of vital statistics, for irrigation, prevention of disease, sanitary survey, etc.? 40 nays, no yeas.

Has it a law for the registration of marriages, deaths, etc.? 16 nays, 20 yeas; eighteen of the latter being qualified, stating that the law is imperfect, a dead letter, carries on in large cities only, etc.

Has it any law in regard to the drainage of lands? 24 nays, 7 yeas; but in the latter the drainage is for agricultural, not sanitary purposes.

Has it a law for introduction of water into cities? 23 nays, 14 yeas; but there is no law to insure the purity of the water.

Has it any law in regard to contagious diseases? 16 nays, 21 yeas. There should be a national law for the enforcement of vaccination, and every foreign nation should adopt it. An international code of health must come sooner or later.

Has it taken any action in regard to the use of well-water, etc? In one hundred and forty-eight towns eighty-two wells were reported, the water in the rest being derived from rivers. Two-thirds of the people in the United States are living in total disregard of all knowledge or interest in the kind of water they are using.

Has it any regulation for the disposal of sewage? Only one-fifth have any definite idea that any action is necessary.

Has the State, county, or city published health reports? Three-fourths of the States ignore the matter.

Is there any known law of development or partial development of disease to give as a legacy to the next century as a preventive? 36 nays and 6 yeas. Special points are mentioned as to the development of zymotic diseases, modes of prevention, etc.

Our present duty is organization. Two hundred thousand persons are annually slaughtered in the States by preventable diseases. The speaker concluded by expressing great hopes of the future, and of the coming century in the increased health, and the lengthening of human life it was sure to bring with it.

At the conclusion of Dr. Bowditch's address, Prof. T. G. Wormley of Ohio, read the Address on Medical Chemistry and Toxicology. Of this we are unable to give an abstract.

In the sections some very interesting papers were read. In the section on Medicine, The unity or duality of croup or diphtheria, the discussion being opened by a paper by Dr. J. Lewis Smith of New York. The conclusions, with which the majority assented,

were that they were two distinct maladies. A paper was also read in this section upon Medical Teachings, by Dr. A. P. Reid of Halifax, which was not reported to the Congress.

Dr. Flint, Jr.'s, paper in the section on Biology was upon the Excretory functions of the Liver. We give the following outline furnished to the Committee of Arrangements.

Is the liver, as far as the production of bile is concerned, an organ for secretion, for excretion, or has the bile functions both as a secretion and an excretion? The bile contains one substance, cholesterine, which is evidently separated from the blood by the liver and is not formed in the substance of the liver itself. The blood which goes to the liver contains more cholesterine than the blood which has circulated through this organ. It is evident that cholesterine is produced in certain of the tissues, particularly in the brain and nervous system. The blood gains cholesterine in its passage through the brain. In old cases of hemiplegia, there is no cholesterine in the blood taken from the arm of the paralyzed side, while it exists in the blood from the sound side. In certain cases of structural disease of the liver, cholesterine accumulates in the blood and produces peculiar toxic effects. The same effects follow the injection of cholesterine into the blood of living animals. Cholesterine is an excrementitious substance; it bears the same relation to the liver that urea bears to the kidneys; it is discharged in the bile into the small intestine, is transformed during digestion into another substance (stercorine) and as stercorine exists in the feces. In addition to the excrementitious function of the bile, this fluid has another function, which latter is connected with digestion and is essential to life.

In the Surgical Section the interest was concentrated in listening to the remarks of Prof. Lister, on Antiseptic Surgery. Owing to the lateness of the hour on Monday, Prof. Lister was unable to enter into a discussion of the paper upon this subject by Prof. Hodgkin. The speaker first alluded to the great trouble which was experienced in faithfully carrying out the antiseptic method perfectly, but he did not think there was any medical man who would shrink from any trouble, no matter how great, which was calculated to help his patient, and to hasten recovery. He alluded to several operations whose success would be at least conjectural without the aid of the antiseptic system of operating. He said: "I should be exceedingly sorry to apply any ligature without strict antiseptic treatment." Antiseptic surgery is dealing with surgical cases in such a manner as to prevent putrefaction. During the course of

his remarks, Prof. Lister exhibited his common method of dressing. He uses Carbolic Acid, but insists that it shall be perfectly pure. That which makes carbolic acid unpleasant to the smell, he said, was cresyllic acid. In a solution of carbolic acid and water, not perfectly clear, the cloud is caused by insoluble carbolic acid, and it is that which irritates the hands, but a perfectly pure solution will not do this. He is very particular in every detail of the application of his dressing. The finger-nails are carefully cleaned before a finger is introduced into the wound. The instruments are all first dipped in the carbolic solution, and if during the operation one of them is laid upon the table, it is again dipped in the solution before being used. The entire dressing is done under a cloud of spray, and when it is changed it must be under spray. Prof. Lister's remarks were extended to a great length, being about three hours in duration.

In the Section on Dermatology and Syphilology, an interesting paper was read by Dr. L. Duncan Bulkley, of New York, upon the question: Are Psoriasis and Eczema local diseases, or are they manifestations of constitutional disorders? The conclusion reached was in favor of their constitutional origin.

The paper of Dr. Goodell, of Philadelphia, upon the Mechanism of Natural and of Artificial labor in Narrow pelvis, and of Dr. Holmes, of Chatham, Ontario, upon the Management of Convulsions in Children, were listened to with interest in the Obstetrical Section, and provoked an animated discussion of the principles they held forth. These papers were followed by a paper upon Enucleation in Ovariectomy, by Prof. J. F. Miner, of Buffalo. Dr. Miner recited the steps by which he had arrived at his present conclusions in regard to Enucleation, explained its principles and adaptation, and urged its trial by members of the section. An interesting discussion followed, in which the merits of the various methods were pretty freely canvassed. The remarks upon the paper were participated in by Drs. Barnes, of London, Simpson, of Edinburgh, Parvin, of Indianapolis, White, of Buffalo, Kimball, of Lowell, Peaslee, of New York, and others.

The remaining sections were not very well attended, the interest of the Congress seeming to centre in those already named, except-

ing, perhaps, that upon Mental Diseases, in which a paper was read by Dr. Isaac Ray, upon the Responsibility of the Insane for Criminal Acts. This paper resulted in the passage of the following resolution:

Resolved, That there is at present manifested a tendency to hold the insane responsible for the commission of acts. That this tendency is unjust, unphilosophical, and contrary to the teaching of pathology, which clearly points out insanity is the expression of disease.

The papers in the other sections were upon the following topics:

In Section VI, Ophthalmology, Tumors of the Optic Nerve. Reporter, Hermann Knapp, M. D., of New York; in Section VII, Otology, What is the Best Mode of Uniform Measurement of Hearing? Reporter, Charles H. Burnett, M. D., Aural Surgeon to Presbyterian Hospital, Philadelphia; in Section VIII, Sanitary Science, Hospital Construction and Ventilation. Reporter, Stephen Smith, M. D., Professor of Orthopædic Surgery in the University of the City of New York.

In the evening two receptions were given by Drs. Thomson and Wilson; they were very elegant affairs and were well attended.

The Congress assembled on Wednesday at ten, A. M. President Gross in the chair. Dr. J. L. Atlee moved that the Secretary of the Publishing Committee be requested to send to the Governor of each State and Territory, and to each Province of Canada, a copy of the address of Dr. Bowditch. Adopted.

A request was received from the National Temperance Association, at New York, asking the Congress to make a declaration in regard to the effect of alcohol as a beverage. The request was laid upon the table. The reports from the sections were received, after which Dr. Seguin, of New York, addressed the Congress upon the subject of Uniformity in Weights and Measures. At the conclusion of his remarks the following resolutions were passed:

Resolved, That the International Medical Congress of 1876 recognize the advantages which would accrue from the introduction of a gradual uniformity in the multiple and heterogeneous elements of physic, as posology, nomenclatures, etc., and in the means and records of medical observation.

Resolved, That in consequence, this Congress authorizes the President to appoint delegates to the International Congress of 1877, with the special mission of presenting a schedule of the means of uniformity in physic actually applicable in all countries,

and another of those which could soon be made acceptable by the profession at large.

Resolved, That the said delegates be advised to invite the co-operation of the men who have already worked for the same cause at the International or National Medical or Pharmaceutical Congress of Paris, Vienna, St. Petersburg, and Brussels.

The address on Surgery was then delivered by Prof. Paul F. Eve, of Nashville, Tenn. This address was so much of it historical, that it will be impossible to give anything like a summary of it. The address of Dr. J. M. Toner, of Washington, upon Medical Biography was also of such a character that nothing but the entire paper would be at all satisfactory.

In the section on Surgery, Prof. Lewis A. Sayre, of New York, read a paper on the Treatment of Coxalgia. Dr. Sayre drew the following conclusions: That morbus cexarius is a disease of early childhood; that it is almost always due to traumatic origin and not necessarily connected with a vitiated constitution; that rest of the parts and freedom from pressure, while at the same time the patient is allowed to exercise in the open air, is the best treatment which can be adopted; that if this plan is adopted in the early stages, the majority of cases will recover with nearly, if not quite perfect motion, and without deformity.

In the advanced *second* stage of the disease, when the absorption cannot be produced, it is better to aspirate the joint and remove its contents, than to wait for ulceration and discharge. If proper treatment has been neglected until the bone has become carious, exsection is justifiable and far preferable to the slow process of exfoliation, giving much better results in usefulness of the limb and infinitely better as to deformity of the body and motion of the joint. An animated discussion arose at the conclusion of this paper between Prof. Sayre and Prof. Gross, the latter being inclined to favor the theory that constitutional defects had an active agency in the production of hip-joint disease. At the conclusion of Dr. Sayre's paper Prof. Wm. H. Van Buren read a paper upon the Medical and Surgical Treatment of Aneurism. Dr. Van Buren's conclusions were as follows:

1. Tufnell's treatment of aneurism, by rest, position, and restricted diet, offers a valuable resource in thoracic and abdominal aneurisms.

2. It should always be tried in innominate, subclavian, subclavio-axillary, and iliac aneurisms, before resorting to measures attended by risk of life.

3. For aneurisms of the subclavian and iliac arteries, the Hunterian operation, with our present means of preventing secondary hemorrhage, is not justifiable.

4. For reasons formally set forth by Holmes and Henry Lee, the "old operation" cannot properly be substituted for the Hunterian operation in these cases, but should be held in reserve for special cases.

5. It is the most safe and surgical resource in gluteal aneurism, if the circulation can be commanded by the hand *in recto*.

6. The mode of cure by embolism, aimed at in the method of manipulation, is a not unfrequent explanation of what is called spontaneous cure of aneurism.

7. The value of Esmarch's bandage in the treatment of aneurism is probably not fully estimated.

8. In view of the promising features presented by the cases of Levis and Bryant, into which horse-hair was introduced into an aneurismal tumor, the repetition of this operation, or the substitution for horse-hair of Lister's prepared catgut or other animal substances, may be properly tried.

In section one, Medicine, a paper was read by Prof. Roberts Bartholow, of Cincinnati, upon the question, Do the Conditions of Modern Life favor, specially, the Development of Nervous Diseases?

The paper was referred to the Committee on Publication, without any expression of the opinion of the Section upon the questions involved.

Dr. Bartholow's opinion was that the increase in insanity is more apparent than real, its seeming increase being due to the increase of intelligence upon the subject, the spread of news by the press and the increased attention paid to victims of insanity. A paper was also read in this section upon the Etiology of Epilepsy, by Dr. Wm. B. Neftel, of New York, and one by title upon the Treatment of Phthisis Pulmonalis, by Dr. E. G. Eliascopulus of Galaxidi, Greece.

In the section on Biology, Prof. Rudnew, of St. Petersburg, presented four papers, as follows:—On the Structure of the Sweat Glands in Man, the Horse, and Sheep, by Dr. Galani; on the Nerves, and their Termination in the Pleuræ of the Rabbit, the Dog, and the Cat, by Dr. Lebedeff; upon the Microscopical

Anatomy of the Nervous Apparatus of the Bronchi and Lungs in the Frog, the Rabbit, and the Dog, by Dr. Jantchich ; upon the Endings of the Nerves in Skin of Man, by Dr. Jantchich. Dr. J. G. Richardson read a paper upon the prevention of fungous growths in solutions for Hypodermic injection, and their prevention by Salicylic Acid.

In Section IV, Dermatology and Syphilology, the question assigned for discussion was, The Virus of Venereal Sores ; its Unity or Duality. The reporter was Dr. F. J. Bumstead, of New York. The conclusions which he adopted, and which received the sanction of the Section were as follows :—

1. The virus of venereal sores is dual.
2. Venereal sores may be due to the inoculation of the syphilitic virus, and also to the inoculation of products of simple inflammation.
3. These two poisons may be inoculated simultaneously.
- 4 (additional). The present state of science has demonstrated that suppurating inflammatory lesions resembling chancroids, may be produced on various portions of the body by inoculation with simple pus from various lesions.

A paper upon the same subject by Dr. C. R. Drysdale, of London, was read by title. Dr. Heitzman, of New York, presented a paper upon Seborrhœa.

In Section V, Obstetrics, Dr. W. L. Atlee introduced the subject of the treatment of Fibroid Tumors of the Uterus.

The subject was treated mainly from the standpoint of personal experience.

Two principal divisions of the subject were made, as :—

I. Tumors usually accompanied with hemorrhage, embracing (a), fibroids occupying the vaginal canal ; (b), fibroids within the cavity of the uterus ; (c), interstitial submucous fibroids ; (d), interstitial fibroids proper ; (e), recurrent fibroids.

II. Tumors usually not accompanied with hemorrhage, including (a), interstitial subperitoneal fibroids ; (b), sessile peritoneal fibroids ; (c), pedunculated peritoneal fibroids ; (d), interstitial cervical fibroids ; (e), myomatous degeneration of the uterus ; (f), fibro-cysts of the uterus.

The author dwelt upon the best mode of treatment both surgical and medicinal—the removal of tumors *per vias naturales*—and by abdominal section—the propriety of extirpating a fibroid uterus by either of these methods—a consideration of the several agents which are supposed to control the growth of fibroid tumors.

Following Dr. Atlee's paper were two others, one upon the Three Most Important Obstetrical Instruments by Prof. Lazarewich, of Kharkoff, Russia, and one upon the Cure of Ovarian Cysts by Electrolysis, by Frederick Semeleder, M. D., of Vienna. Dr. Semeleder detailed some very remarkable results and evidently excited considerable interest in the subject in the minds of his auditors.

The work in the other Sections was as follows :—

Section VI, Ophthalmology, Orbital Aneurismal Disease and Pulsating Exophthalmia ; their Diagnosis and Treatment. Reporter, E. Williams, M. D., Professor of Ophthalmology in Miami Medical College of Cincinnati ; in Section VII, Otology, in what Percentage of Cases do Artificial Drum-membranes prove of Practical Advantage? Reporter, H. N. Spencer, M. D., of St. Louis ; an interesting paper by Dr. S. J. Jones, of Chicago, upon Certain Modifications in the Ordinary Methods of Treatment of Chronic Non-Suppurative Inflammation of the Eustachian Tube and Middle Ear was also read in this section. The papers in Section VIII, Sanitary Science, were upon the General Subject of Quarantine with Particular Reference to Cholera and the Yellow Fever. Reporter, J. M. Woodworth, M. D., Supervising Surgeon-General U. S. Marine Hospital Service ; Disinfection in Yellow Fever. By C. B. White, M. D., of New Orleans ; in Section IX, Mental diseases, Simulation of Insanity by the Insane. Reporter, C. H. Hughes, M. D., of St. Louis, Mo. We are able to give the following resumé of Dr. Hughes' paper :—

The feigning of insanity by the sane has long been recognized as a practical fact. The possibility of similar efforts on the part of men really insane has been ignored or forgotten. The fact that the proof of simulation possesses no real practical value, in the case of a person already adjudged to be insane, is, probably, one cause of the rareness of recorded cases.

Advanced general dementia is incompatible with simulation. Acute and general mania is also incapable of coexistence with feigning. In recovery from the latter condition, circumstances might easily give rise to simulation of a state recently passed through. Experience and observation might certainly help to an excellent imitation of a state so lately endured.

Simulation requires and implies some degree of rationality, and usually some motive. This is by no means incompatible with insanity. In the remissions of periodic mania, in certain cases of chronic general mania and certain forms of hysterical mania, and especially in affective or moral insanity without distinct intellectual impairment, simulation is perfectly possible and practicable. The existence of susceptibility to ordinary motives is recognized in the management of every insane asylum.

Striking instances of success in the simulated abandonment of delusions, so common in alienistic literature, suggest an equal facility at invention or pretence.

The criminal classes of our great cities are born and trained to deception. Simulation might very naturally be added to constitutional infirmity. Such cases probably occur oftener than is supposed. Many famous and historic cases might be correctly characterized as compounds of simulation with actual disease.

Rarely does insanity affect all the faculties alike. Among the rational acts done by the insane man simulation may happen to occur. Especially probable is it that a man recovering from mania might imitate the crazy acts recently prompted by disease if adequate motive existed.

Simulation is peculiarly applicable in those forms of insanity which involve the affective faculties, leaving the intellect comparatively untouched.

The question of responsibility in cases where simulation is mingled with actual disease is a very difficult one. The ancient legal test, "knowledge of right and wrong," is here wholly inadequate.

The motive for simulation in the insane of hysterical tendencies is often the craving for sympathy and attention. Occasionally, however, it seems to be wholly motiveless—a mere freak of disease.

We should beware of inferring because of detected simulation, the non-existence of disease.

At 7. 30 P. M., the Congress was addressed by Dr. J. J. Woodward, Surgeon U. S. Army, upon the Medical Staff of the United States Army, and its Scientific Work. Dr. Woodward's address was delivered in the Hall of the Jefferson Medical College, and was well attended.

He sketched the nature of all the papers and reports connected with the medical service. 200,000 had died of sickness during the war; 100,000 of wounds. 16,000 volumes of manuscript record books, and many tons of papers of all kinds, came back to the Surgeon-General when the hospitals were closed after the war, all of which had to be examined and analyzed. It would have been a great national crime not to have done so, and not to have extracted from them the immense amount of material they contained for scientific and useful purposes. No great national medical library existed at the beginning of the war; nor was there any great pathological museum. Valid reasons for the establishment of each at Washington, under national auspices, were given by the speaker. The whole medical staff of the army had contributed to both, but the heavy labor had been performed by three Assistant Surgeons, Drs. Billings, Otis, and Woodward, without extra compensation, in addition to their other administrative work.

Since 1865, the history of 300,000 cases had been traced through the records of the Surgeon-General's office, but, from want of proper clerical force, 12,000 to 13,000 applications were now lying unanswered, the number of clerks being reduced from 100 to less than half that number. Over 6,000 quarto pages of publications have thus far been issued from this office. The reports on meteorology, formerly published, are now discontinued, the Signal Office having taken charge of this branch of inquiry. Other reports emanating from the Surgeon-General's office were referred to, as that of Dr. Billings on posts and hospitals, the records of physical examination of recruits, the report of Dr. Ely McClellan on Cholera, etc. The importance of the chemical laboratory connected with this office was dwelt upon.

The volumes of the "Medical and Surgical History of the War," were the records of 270,000 cases. Cheney, in his medical statistics of the war of the Crimea, had 40,000 cases to describe, and 17,000 in the Italian war; but they were not subsequently followed up, as they have been with us. The National Medical Library at Washington now contains 40,500 bound volumes and 41,000 pamphlets. 275,000 cards of all the subjects in the books and journals of this library await the hands of the printer. The catalogue *raisonne*, when published, will make five volumes of 1,000 pages each. The Army Medical Museum contains 19,000 specimens, illustrating military surgery and camp diseases during the war. The hope is, to make this also a general pathological museum. It contains 1,500 skeletons and crania; 1,600 crania alone from all countries, with complete measurements by Dr. Otis. This museum, if added to from private sources, would be especially valuable, particularly if they were specimens which have formed the basis of original researches.

Dr. Woodward then gave an exhibition with the magic lantern, of pathological specimens, microphotographic sections, etc. The thanks of the Congress were tendered him for his very interesting address.

The Congress assembled in the Chapel of the University on Thursday, Sept. 7th, at ten A. M. Dr. Gross in the chair. The reports of the Sections were received and accepted.

On motion of Dr. H. I. Bowditch, of Boston, the following resolutions were adopted:

Whereas, the work already accomplished by the officers connected with the Bureau of the Surgeon-General of the United States Army, in the establishment of a medical library, and in the preparation of its complete and unique catalogue, in the formation of an anatomical museum, from which important scientific results have already been obtained, and which have been not only a source of honor to these United States, but of value to foreign lands and wherever science is cultivated; and

Whereas, This Congress learns with regret that, owing to a lack of sufficient clerical force and of pecuniary means, not only some of the works already in progress has been suspended, but that other work of equal value cannot be undertaken, although ample materials for the same are now lying unused in the Surgeon-General's office; therefore

Resolved, That a committee of three be appointed to prepare a memorial to be presented to the Congress of the United States, at the earliest day possible, at its next session, to urge sufficient support to these most important works.

Resolved, That it is desirable that said memorial be signed by the President, Vice-Presidents, and Secretary General of this body.

The President appointed Drs. Bowditch, of Boston, Rudnew, of St. Petersburg, and N. S. Davis, of Chicago, as the Committee to prepare this memorial.

Upon motion of Dr. J. P. White, of Buffalo, N. Y., it was ordered that the printed pamphlet containing Dr. Bowditch's paper on Hygiene and Preventive Medicine, be sent to the Presidents of State and Territorial Medical Societies and Sanitary Boards of the United States, and the Societies and Sanitary Boards of the Dominion of Canada.

The address on Obstetrics was then delivered by Dr. Theophilus Parvin, of Indianapolis. Prof. H. Miyake, of Tokio, Japan, in the chair. Dr. Parvin said that American obstetric practice was based upon the English rather than upon the French school. He paid a glowing tribute to the early founders of Obstetric teaching in America, and sketched the advances and discoveries which had been made by Americans. He said that the two greatest glories of America's contributions to gynaecology were the cure of genito-urinary fistula and the removal of the ovarian tumor. Holding them up she could justly say, "these are my offerings to humanity and medicine."

The address on Medical Jurisprudence was delivered by Prof. Stanford E. Chaillé, of New Orleans. He said:

Medical Jurisprudence owes its power to knowledge derived from every branch of medicine, but the law determines how far this power shall be utilized in the administration of justice. Hence the development of medical jurisprudence has varied in different nations with the progress of medical science, and with the extent of its applications to the protection of property, repu-

tation, and life. Efficiency in this legal application varies with the appreciation of medical knowledge by the rulers of a nation, and it results that laws more favorable to the culture of legal medicine are to be found in nations ruled by the educated few than in those governed by the people. The Papal canon laws, originating many medico-legal questions, sowed in 1620 by the hand of Zacchias, a Pope's physician, the first sound seed of medical jurisprudence in the land of Columbus, then the home of science and the arts. The new-born shoot, languishing in Italy, was transplanted to German soil, where it received such culture as nourished its growth, and reproduced seed to generate in other lands.

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Since 1790 no nation has surpassed France in the culture of this science. The judges appoint medical experts: these, since 1803, must be graduates in medicine and have passed an examination in legal medicine. How much of medico-legal science has been transported from Germany and France to Great Britain and the United States would, I fear, prove offensive to Gallic and still more to Anglo American vanity. Great Britain transmitted to this nation laws barbarously conspicuous for the absence of provisions to apply medical knowledge to the administration of justice, and Anglo-American law continues to be, in large measure, hostile to medical jurisprudence. However, British laws have done something for the science and a little for the art. For Great Britain has fostered medical education; did, in 1803, found a chair of forensic medicine in one university, and has now such chairs in all its medical colleges; has by the registration act and other laws greatly strengthened the medical profession, and has compelled its courts to accept expert evidence only from registered and therefore educated medical men; still "the crowned republic" remains destitute, as does its democratic American offspring, of popular, hence of governmental, appreciation of the legal importance of medical knowledge, as is proved by the same lack of any system to secure the medical evidence of competent experts, as characterized its laws when surgeons were barbers and physicians were astrologers, sorcerers, and interpreters of dreams. What wonder that Germany and France began the study earlier and have prosecuted it more successfully. The States of the Union have for the most part left the culture of medical science to individual enterprise, which supplies solely that which the private citizen demands—practitioners of medicine to heal the sick. The States have as yet made no demand for competent medical experts to aid the administration of justice, and have done nothing designedly for the culture of medical jurisprudence. What growth can this branch of State medicine have so long as a State does not recognize even its existence?

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In the United States there are probably forty-five thousand medico-legal autopsies made annually. The services of a skilled expert at these "coroners' inquests" is of inestimable importance. Further, our courts have annually from forty-five hundred to treble this number of criminals necessitating medical testimony. Whatever the number may be, it would indicate inadequately the number of citizens whose welfare is involved in the efficient application of medical knowledge to the administration of justice. What are the methods which the Anglo-American law adopts to secure in practice that "best attainable evidence" which in theory it demands? It entrusts medico-legal autopsies, which require special medical and some legal knowledge, to those having neither the one nor the other, except by accident; for these coroners—whose inexperience our law assumes by constant "rotation of office"—owe their position solely to political popularity, a qualification which a competent expert is most unlikely to possess. Are these unqualified officials supplied with efficient aid? If so, again by accident, since the law leaves it to chance, or to the coroner, or to his still less qualified jury, to provide a medical expert; and, as is usual, accident and ignorance provide inexperience and incompetence. Could ingenuity devise for medico-legal autopsies any methods more inefficient than these, which Anglo-American laws, framed before the birth of medical jurisprudence, have barbarously perpetrated? With the power of medical science thus crippled at the coroners' inquests, then prostituted by the partisan opinions of incompetent experts, then perverted by advocates, and at last, when emasculated of all vigor, submitted for decision to those unable to estimate its weight, what wonder that such gross misapplication of medical knowledge brings upon it that public contempt which justly belongs to methods as monstrous, and to which true medical knowledge is a helpless, pitiable, and disgusted victim. So great has been the diffusion of knowledge, so ardent the love of justice, we have in the main kept pace with, and, in some particulars, outstripped the mother land. Fairly we can name no more, reasonably no more should be expected.

The Sections met at two P. M. In Section I, Medicine, the question for discussion was: "The Influence of High Altitudes on the Progress of Phthisis." Reporter, Charles H. Denison, M. D., of Denver, Colorado.

In Section II, Biology, The Mechanism of Joints. Reporter, Harrison Allen, M. D., Professor of Zoology and Comparative Anatomy in the University of Pennsylvania; in Section III, Surgery, The Causes and Geographical Distribution of Calculous Diseases. Reporter, Claudius H. Mastin, M. D., of Mobile, Alabama; Electrolytic Treatment of Malignant Tumors. By W. B. Neftel, M. D., of New York.

In Section IV, Dermatology and Syphilology, the question was: The Treatment of Syphilis with Special Reference to the Constitutional Remedies appropriate to its various Stages; the Duration of their Use, and the Question of their Continuous or Intermittent Employment. Reporter, E. L. Keyes, M. D.

The following slight modification of the conclusions of the author were adopted by the Section:

Negative conclusions, views for which there would seem to be no foundation in fact.

1. Syphilis commencing mildly needs but little treatment, and does not require mercury.
2. Mercury given internally is necessarily debilitating.
3. Mercury is only useful in secondary syphilis.
4. Iodide of potassium is of considerable value in secondary syphilis.
5. Iodide of potassium is of no value unless preceded by the use of mercury.
6. Iodide of potassium acts by liberating mercury which has been lying latent.

Positive conclusions, which, in the present state of our knowledge, may be affirmed.

1. Mercury is an antidote to the syphilitic poison, and of service in controlling all its symptoms in all, even the latest stages of the diseases; its power over gummata being least, and not to be relied upon.
2. Mercury in minute doses is a tonic.
3. Iodine cures certain symptoms of syphilis, but does not prevent relapses.
4. Mercury, long continued uninterruptedly, so far as practicable in small doses from the time of earliest eruption, constitutes the best treatment of syphilis.

A paper on the same subject by Dr. Charles R. Drysdale, of London, was read by title.

A paper entitled "Verrugas, a Disease peculiar to Peru," by Dr. George A. Ward, of Lima, was also read by title.

The time of the Obstretrical Section was occupied with listening to and discussing the paper of Prof. Wm. T. Lusk, of New York, upon The Nature, Causes and Prevention of Puerperal Fever.

In Section VI, Ophthalmology, the paper discussed was: Are Progressive Myopia and Posterior Staphyloma due to Hereditary Predisposition, or can they be induced by Defects of Refraction,

acting through the Influence of the Ciliary Muscle? Reporter, E. G. Loring, M. D., of New York.

The following were the conclusions of the reporter:

From the fact that so large a percentage of children are myopic, whose parents are not near-sighted, while the myopia increases directly with the amount of increased tension of the eyes, and from the fact that an interchange of refraction may occur, whereby an eye which is not congenitally myopic may become so in spite of hereditary tendency against it, it would seem to follow that hereditary predisposition, though undoubtedly a potent cause, is not only not the sole cause, but it is not even the predominating cause.

2. The action of the ciliary muscle, taken by itself, exerts but little influence on the production of myopia, and still less on the formation of the cone.

Dr. Stevens, of Albany, read a paper on the relations between Refractive lesions of the Eye and Corneal Diseases.

The Section on Otology was occupied in the discussion of a paper by Dr. Clarence J. Blake, of Boston, in which the following question was considered; it is one of much importance, and to which, we believe, hitherto, but little attention has been paid: What is the Best Mode of Determining the Hearing of School-Children, and how should partially Deaf Children be Instructed—in mixed classes with those who hear well, or in separate classes where due allowance will be made for their defective hearing?

In Section VIII, Sanitary Science, the Disposal and Utilization of Sewage and Refuse, was discussed. The conclusions reached, were:

1. Every plan for the laying out, or extension, of a city or town, should have as an indispensable part of it, a corresponding and coextensive plan for the continuance or substitution of the natural drainage of the locality, and for the proper construction of a system of sewers.

2. The question in regard to the removal of waste and impurities from towns is not as to the maintenance of sewers, but as to whether they should be depended upon alone, or should be supplemented, more or less largely by other means of conservancy.

3. Every sewer not supplied with a sufficient flow of water to secure the transportation of its contents is a nuisance, intensifying the evils it ought to remove. Ventilation of sewers will mitigate, but not entirely correct such evils.

4. Conditions sufficient for sanitary security are afforded by the discharge of sewage at a considerable distance from a town,

into the sea, or into a large and rapid river, whose water, at least for many miles below the exit of the sewers, is not used for drinking.

5. The earth-closet method of removal of excreta is, theoretically and practically, satisfactory in a sanitary aspect; the obstacles to its general adoption belonging only to economy and convenience.

A supplementary proposition, affirming that the sewage-irrigation of arable land, well under-drained, is, where practicable, the most economical method of disposal of sewage, and is free from well-grounded sanitary objections, was not concurred in by the Section, which declined to express an opinion upon that subject, as still open to investigation.

Dr. E. R. Squibb, of Brooklyn, N. Y., read a paper on a "Universal Pharmacopœia."

In Section IX, Mental Diseases, Dr. C. H. Nichols, of Washington, D. C., reported on the best Provision of the Chronic Insane. He said, in substance, that provision for this class of patients should be made by constructing buildings in connection with the several insane asylums. That it is not desirable to construct institutions solely for the care of the chronic insane.

On Friday, Sept. 8th, the Congress again assembled in General Session at ten A. M.

On motion of Prof. Paul F. Eve, of Nashville, the following resolution was adopted:

Resolved, That no papers or addresses read before this body, and ordered to be printed, shall be furnished either in abstract or otherwise, for publication in any journal prior to publication of the Transactions.

As we have said elsewhere, this motion came too late in the session of the Congress. If the resolution represents the sentiments of those present, they should have assembled with closed doors.

The amount of material on hand being much larger than anticipated, on motion of Dr. Davis, the following preamble and resolutions were adopted:

Whereas, This Congress marks an era in the history of medicine in the United States of America, the addresses delivered presenting a summary of the progress in the various departments, which will be of great historical value in all coming time; and

Whereas, It is highly probable that these addresses, in connection with the many very valuable papers read and discussed in the Sections, will require for their early publication more money

than will be in the hands of the Treasurer for that purpose; therefore,

Resolved, That the Committee of Publication be authorized and instructed, as soon as practicable after the final adjournment of the Congress, to ascertain the probable cost of publishing the full transactions in a style appropriate for the work, and if the money on hand is found deficient, they shall address a circular letter to each American member of the Congress, asking for such additional sum, not exceeding ten dollars, for each of such members as will supply the deficiency; and that said Committee be authorized to withhold the volume or volumes, when published, from any member who may neglect or refuse to pay the additional sum required.

Resolved, That the Committee on Publication, be authorized and requested to exercise a careful and liberal discretion in preparing and revising the proceedings and reported discussions, in the several Sections, for publication in the transactions of this Congress.

Vice-President McGuire in the chair, Dr. John P. Gray, of Utica, N. Y., delivered the Address on Mental Hygiene. We cannot attempt to give an abstract, as nothing that our brief notes would indicate would do it justice. He referred to the fact that Mental Hygiene had been, until lately, neglected. He considered the topic from three points of view; the individual, the national, and the social. He referred to sociology and political economy as bearing a close relation to the subject. Intellectual activity, he said, is as healthful as physical exercise, but it is to be indulged in under certain restraints and in accordance with certain principles. He referred to the great exhibition, and the influence which the collection of the best exhibits of the arts, manufactures and culture of all nations would have upon mental culture of a people. Education, art, wealth, with all their refining influence, have a marked effect in promoting the mental hygiene of a people. The taste for culture and refinement which they beget, are factors for good which a people or individuals cannot afford to think lightly of. There was a source he said, far above all these, which could not be overlooked. He referred to the dark and stormy times which surrounded this nation at its birth, when its founders were in the habit of looking to God to direct and bless their endeavors. To this and to the God-fearing influence which our ancestors have transmitted to their descendants, is due the dignity and stability of the nation.

He referred to the melancholy example of France, when the people, in their madness, enthroned a woman as a goddess, and worshiped reason as personified in her. He believed that no nation could be substantial which did not have religion as a foundation stone, and what is true of nations is true of individuals. He referred to the motto over the door of the Chapel in which the Congress assembled, "*In Honorem Dei*," and said that that motto was the great secret which men had to learn in Mental Hygiene. Wealth, culture, the highest expressions of æsthetic art, will suffice for the highest development of the national mind, but if underneath all these the people do not recognize the great truths of moral responsibility to the Author and Upholder of all nations, the national as well as the individual life goes out in darkness. "Except the Lord build the house, they labor in vain who build it."

What we have sketched of the drift of Dr. Gray's remarks, will give but a feeble idea of their strength and elegance. In it he took a position which we are glad to see an American bold enough to do in an assemblage of the character of that which he addressed. In our national politics, the truth is becoming painfully manifest that the high moral principles of which Washington's life was an expression, and which actuated and guided his associates, is being lost sight of, and Dr. Gray did well in calling attention to them as one of the principles of Mental Hygiene. Dr. Lunsford P. Yandell followed Dr. Gray in an address upon "Medical Literature." The address was well written and was an interesting historical review of the medical literature of the century. In marked contrast to the address of Dr. Gray, the speaker could not be heard but a few feet from the platform, which was a great fault of some of the other speeches.

In the section on Medicine, Prof. Stillé occupied the chair. A paper on The Treatment of Simple Ulcer of the Stomach, by Dr. H. Lebert, of Breslau, was read by its translator, Dr. Chas. W. Dulles, of Philadelphia. He pursues in his treatment the plan of giving the stomach rest, and employs to that end, nutritious enemata with anodynes. One case under his observation had subsisted for thirty-one days without the introduction of food into the stomach.

Following this paper, Dr. Howard, of Montreal, read a paper on "Progressive Pernicious Anæmia;" a paper was also presented upon "Alcohol in its Therapeutic Relations as a Food and a Medicine." By Ezra M. Hunt, M. D., of Metuchen, New Jersey. The following propositions of Dr. Hunt the Section affirmed and ordered them reported to the Congress in general meeting:

1. Alcohol is not shown to have a definite food value by any of the methods of chemical analysis or physiological investigation.
2. Its use as a medicine is chiefly that of a cardiac stimulant, and often admits of substitution.
3. As a medicine it is not well fitted for self-prescription by the laity, and the medical profession is not accountable for such administration, or for the enormous evils resulting therefrom.
4. The purity of alcoholic liquors is not as well assured as that of articles used for medicine should be. The various mixtures when used as medicine should have definite and known composition, and should not be interchanged promiscuously.

Prof. Rudnew read for Prof. Bérédow, of St. Petersburg, a paper upon Sclerosis of the Vessels of the Lungs.

In Section III, Surgery, a paper was read by Mr. Wm. Adams, of London, on Subcutaneous Division of the Neck of the Femur, which gave rise to an interesting discussion and the report of other operations of a similar nature.

In the Section on Dermatology and Syphilology, a paper was read by Dr. Engelsted, of Copenhagen, on the Measures to Prevent the Propagation of Venereal Diseases in Denmark. This was followed by a paper by Dr. Drysdale, of London, on The Prevention of Syphilis.

Section V, Obstetrics, Prof. Simpson in the chair. Dr. Fitch, of New York, read a paper on Paracentesis Aspiration and Transfusion. He referred to the methods formerly used in these operations, and in conclusion presented an instrument which he termed the dome-trocar, which he considered admirably adapted to these operations. Dr. Trenholm, of Montreal, then read a paper upon Uterine Hemorrhage, confining his remarks to a form of hemorrhage which he had met with during pregnancy. Following this was a paper by Prof. J. P. White, of Buffalo, upon "Chronic Uterine Inversion." Dr. White explained the claims which he

made to priority in this operation over Tyler Smith, and then detailed the reasons for coming to the conclusion which he had reached, that all inverted uteri, of no matter how long duration, were susceptible of restoration, unless bound down by adhesions which it would not be safe to rupture. He related in detail three of his twelve successful cases, and illustrated by diagrams his method of operating. He expressed his belief that there was a stage in the process of uterine involution when it was unsafe to use much if any force, but that when that stage was past the method which he advocated, which was far from forcible, was capable of relieving the deformity. The fundus, except in recent cases, is not "dimpled" in the operation, but that which came down last, i. e. the neck is restored first, then the body, the fundus following. Dr. White's paper elicited an interesting discussion; it was followed by one by Prof. Rochester, of Buffalo, upon Retroversion of the Gravid Uterus, in which he reported a case, and the method he pursued for its relief.

The programme in the other Sections was as follows:

In Section VI, Ophthalmology, Report of One Hundred Cases of Senile Cataract. By Dudley S. Reynolds, M. D., of Louisville, Kentucky; in Section VII, Otology, Aural Vertigo with Variable Hearing. By Charles H. Burnett, M. D., Aural Surgeon to the Presbyterian Hospital, Philadelphia; in Section VIII, Sanitary Science, Metrical System of Weights and Measures. By E. R. Squibb, M. D., Brooklyn, New York; and in Section IX, Mental Diseases, Treatment of Inebriates in Asylums. By George Burr, M. D., of Binghamton, N. Y.

In this Section Dr. Edward Spityka read a paper "On the Methods of Examination which will reveal a Clear and Decisive Connection between Symptoms of Insanity and the Pathological lesions on which they depend."

Friday concluded the work in the Sections. On Friday evening, the Public Dinner of the Congress was given in St. George's Hall. About 170 delegates were present. Prof. Gross presided, supported on his right by Prof. Lister, of the University of Edinburgh, and General Hawley, of the United States Centennial Commission, and on his left by His Excellency the Governor of Pennsylvania, and Mr. Wm. Adams, President of the Medical Society of London.

Replies to toasts were made by Prof. Joseph Lister, Governor Hartranft, Dr. Woodward, U. S. Army, General Hawley, President U. S. Centennial Commission, Prof. Hjort, of Norway, Profs. J. C. Dalton and Stillé, Mr. Wm. Adams, of London, Dr. Hings-ton, of Montreal, Profs. Davis, of Chicago, and Chaillé, of New Orleans, and Prof. Gross.

The Congress assembled on Saturday, Sept. 9th, at ten o'clock, Prof. Gross in the chair. The Secretary General reported that four hundred and forty-seven delegates had been registered. On motion of Dr. Toner the list was confirmed. Reports from the Sections were received.

A time of mutual congratulation and general good feeling then followed, which was one of the most pleasant features of the Congress.

This was opened by the following resolutions, offered after a speech abounding with complimentary allusion, by Prof. J. P. White, of Buffalo:

Resolved, That the officers and trustees of the University of Pennsylvania are hereby tendered our cordial thanks for the very liberal use of their excellent buildings for the meetings of this International Medical Congress.

Resolved, That the officers and trustees of the Jefferson Medical College are hereby tendered the cordial thanks of this Congress for the use of their lecture-room for the most interesting lecture of Dr. J. J. Woodward, U. S. A.

Resolved, That the Centennial Medical Commission of Philadelphia are hereby tendered the cordial thanks of this Congress for the most excellent manner in which its members have discharged the arduous duties devolved upon them, and by which our pleasure and profit have been so much enhanced.

Resolved, That the president and other officers of the International Medical Congress of 1876 are hereby tendered the cordial thanks of the Congress for the excellent manner in which they have discharged the arduous duties devolved upon them, and by which our pleasure and profit have been so much enhanced.

Resolved, That the cordial thanks of the International Medical Congress are especially due to Drs. Thomson, Wilson, and Strawbridge, and to Messrs. H. C. Lea, and J. B. Lippincott, for their generous hospitality.

These were adopted amidst great applause.

Dr. Grant, of Ottawa, eloquently addressed the Congress, and

reported the following resolutions, adopted at a meeting of the Canadian delegates to the Congress:

Resolved, That the Canadian members of the International Medical Congress desire to express their sense of the great consideration and urbanity with which they have been treated by the officers and members of the Centennial Medical Commission, and beg by this resolution, to tender their warm thanks for the same.

Resolved, That the Canadian members of the International Medical Congress most cordially join with the other members of the Congress, in thanking the members and citizens of Philadelphia for the generous hospitality extended to its members throughout the present session.

Prof. Charles J. Hare, of London, then read the following expression of congratulation on the part of the British delegates:

The delegates from Great Britain to the International Medical Congress at Philadelphia, beg to congratulate the President and the several committees on the complete success of the Congress, on the high value of the various addresses presented to it, and on the forward impulse which it has given to the progress of medicine in the widest sense of that word. They desire at the same time to express in the strongest and warmest terms their sense of and their thanks for the unmeasured kindness and courtesy, and the unbounded hospitality with which they have been received on this Centennial occasion, and to add that they will carry back with them a most grateful recollection of that warm right hand of fellowship which has been so warmly extended to them by their brethren of the United States.

The paper was signed on behalf of the delegates by Dr. Hare, late Professor of Clinical Medicine in University College, London; Mr. R. Brudenell Carter, Hunterian Professor of Surgery in the Royal College of Surgeons of England; and Mr. William Adams, President of the Medical Society of London.

On motion of Dr. Bowditch, it was

Resolved, That we, as a brotherhood of physicians from the North, South, East, and West of this country, hereby tender to our associates from other lands our most earnest wishes that they may have safe and happy returns to their homes, and we would suggest the hope that they will carry back many pleasant memories of this fraternal meeting now closing, and which has been most appropriately held in this generous and noble city of Philadelphia.

Prof. Sayre, of New York, offered the following resolution, which was seconded in a beautiful little speech by Mr. Carter, of London, and cordially adopted by the Congress:

Resolved, That this International Congress request our President, Prof. Gross, to sit for his portrait, and that the Committee of Publication be instructed to have the same engraved and printed in the frontispiece to the volume of our Transactions.

(It is understood that, for sake of correctness, this shall be a photographic likeness, unless otherwise ordered by the Committee.)

The General Secretary presented the preliminary circular of the International Congress of 1877, at Geneva.

The address on "Medical Education," was then delivered by Prof. N. S. Davis, of Chicago, Ill. Dr. Gibbons, of San Francisco, one of the Vice-Presidents in the chair.

At its conclusion, Prof. Gross made some appropriate remarks.

The Congress was then declared adjourned *sine die*.

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Editorial.

The International Medical Congress.

The Medical Congress was, as we anticipated, a complete success. A large and thoroughly representative body of medical men met in Philadelphia, and the result of their labors will reflect credit upon all who participated in the deliberations of the Congress. The place of meeting was appropriately at Philadelphia, the home of early American medicine, as well as the birth-place of the Declaration.

While, as a matter of course, the Congress was largely made up of American physicians, our foreign brethren were well represented, delegates being present from England, Ireland, Scotland Prussia, Russia, Austria, Denmark, Belgium, Norway, Finland, Australia, Japan, Cuba, the Argentine Republic, Mexico and Canada.

The addresses before the Congress in the general session were all of an excellent character; the address of welcome from Prof. Gross was particularly fine and was eloquently and impressively delivered. This being the "year of jubilee" to Americans, the natural tendency of the authors of most of the public addresses to make them of a historical nature was excusable; we are sure however, that the foreign delegates found much in them of interest, and will rejoice that so young a nation has done so much for the science of med-

icine and surgery. The addresses of Drs. Gray and Bowditch may be, perhaps, excepted as being not so much of a national or historical character, the teaching of both, if carried out, will have a large influence for good in an international as well as a national sense.

The selection of Prof. Gross as President, was a fitting compliment to the man and to the city in which the Congress was held; he presided with courtesy and dignity.

The arrangements for the meetings were admirably made and well carried out, the programme for each days work, the list of delegates registered, and the outlines of papers presented on the special questions assigned for discussions in the sections, which were furnished to each member, added much to the convenience of delegates. Admirable facilities were also placed at the service of the Congress for the reception of mail matter, and a special room, with ink and paper, was set aside for correspondence and conversation. With a eye to the convenience of the members whose places of residence was at a distance from the University who could not therefore conveniently go to lunch between the time of adjournment of the general session and the meeting of the sections, a lunch was served at one o'clock each day, in the basement. Everything passed off without clash or confusion; the committee of arrangement of the American Medical Association might do well to take lessons.

The interest in the sections was well sustained, but centered, of course, in the three principle ones, Medicine, Surgery and Obstetrics.

The social element, while not made too prominent, added much to the pleasure of the week. The reception on Monday evening at Judges' Hall, the hospitable entertainment given by Drs. Wilson and Thompson on Tuesday evening, by Dr. Strauchbridge on Wednesday evening, and by Messrs. H. C. Lea and J. B. Lippincott on Thursday evening, with the grand dinner Friday evening will be long remembered as very pleasant incidents of a memorable week. We can not now dwell upon all the points which we would delight to mention, but would refer our readers to the very full report which we are able to lay before them. As we were present during most of the session, we were able to secure such a report as will give a fair idea of what was done; we are sure however, that all our readers will desire a copy of the transactions when printed.

A resolution passed on the fifth day of the session, forbidding the members to furnish their papers, either as a whole or in abstract, to Medical Journals, seemed to us ill advised, and certainly too late in the session to accomplish its object.



The large space given to our report of the Congress involves not several notices and reviews. They will appear in our next number.

B U F F A L O

Medical and Surgical Journal.

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No. 3.

Original Communications.

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ART. I.—*Suggestions as to a Method of Closing recto-vaginal fistula.* By JULIUS F. MINER, M. D., Professor Special and Clinical Surgery Buffalo Medical College.

Recto-vaginal Fistula, after a vast amount of trial, was abandoned by the older surgeons as incurable. The success attending the introduction of metal suture, and the successful closure of vesico-vaginal fistula by improved methods, revived the expectations that similar results would obtain in recto-vaginal as in vesico-vaginal fistula, but I think the experienced surgeons of the present day have found much greater difficulty in closing fistula of the recto-vaginal septum than in closing vesico-vaginal fistula. This, at least, has been my own experience, and I am now speaking of what I know from personal observation.

I have tried to close recto-vaginal fistula and failed. I have operated upon patients who have been previously operated upon by some of the most experienced and capable surgeons of this country, who, after repeated trials have failed; I was nothing more successful. From disappointment and failure I now began to can-

vass the possibilities. Could recto-vaginal fistula be closed? Do surgeons know of any method of operation offering reasonable chances of success?

I have practiced all the more approved plans of procedure; I have seen my friends make similar attempts, and we have all alike failed. I might attribute my own failure to want of experience in the operation, but taking the observation as a whole, such conclusion is untenable. My recent observations embody the suggestion which I desire to make.

The anatomical characters of the rectum are well known; the rectum is a thick, firm, fibrous sheath, loosely attached upon its external surface to adjacent tissues, capable of distension and also of *displacement*.

It now occurred to me that I could detach the rectum from its connections and draw it down, cutting off all below the fissure or opening, thus making the canal *new* rather than longer trying to mend it, and could stitch the shortened tube to the verge of the anus, or could, at least, make a flap of the rectal tissue and draw it down so as to insure the closure of the fistula. Fecal matter retained in the lower rectum, constantly finding its way through the opening appeared the principal cause of failure, a condition which rupture or distention of the anal sphincter did not prove capable of preventing. If the tube could be drawn down it would be impervious, and there could be no such source of failure. It is, perhaps, not necessary, possibly it is better, not to separate the rectum in its whole extent, but only to cut up an adequate flap and fully cover the fistula. As is well known, these openings are generally near the outlet, situated exactly where it is most liable to have contents of the bowels forced through into the vagina. When higher up, they are a little more difficult to reach, but easier to cure.

The few opportunities I have had to test my suggestion justifies the conclusion that recto-vaginal fistula can be closed by this plan of procedure more certainly than by any other, and I am quite sure surgeons will have opportunity to try this after all former methods have failed.



ART. II.—*Clinical Notes.* By JULIUS A. POST, M. D.

On the fifteenth of September 1875, Mr. B., aged 32 years, married, by occupation a newspaper reporter, called at my office and gave me the following history. About a year ago he began to lose the faculty of complete sexual intercourse, followed by involuntary seminal emissions and great irritability of the urethra, and now presented the appearance of a man whose nervous system was completely exhausted. He had been treated by several medical men without benefit, and had given his case up as hopeless. I persuaded him to make another trial. He assured me that masturbation had nothing to do with the case, as he never was addicted to the practice. His bowels were constipated, appetite poor, sleeps badly, and his whole nervous and general system greatly debilitated. Chemically, his urine presented nothing abnormal; microscopically, showed abundance of uric acid crystals, and occasionally, in the morning, a few stray spermatozoa. He was ordered senna confection at night sufficient to move the bowels. Quinn. sulph. grs. ii, with Ferri. Pulv. grs. v, in wine after each meal, and Acid Muriatic dil. gtts. ii, in simple bitters before eating, with warm bath at bedtime and an injection, per urethram, of warm water $\mathfrak{z}$ i and Plumbi Acetas grs. ii, in solution several times a day; this he followed faithfully for two weeks, at the end of that time his general appearance had improved somewhat, but the sexual apparatus remained *in statu quo*, and he began to get impatient as to the result. The bitters and acid discontinued, and ordered Acid Phosphoric dil. gtts. v, with Tinct. Nux Vom. gtts. ii before meals in wine, and began to introduce a gum catheter, cooled with ice, to as low a temperature as he could bear, three times a day. He thought he felt less irritability of the urethram, but soon grew discouraged, and in order to hold him I was obliged to change the treatment in some way. His general condition had improved very much; appetite good, bowels regular and rested well nights. I determined to continue the remedies as before and try electricity, using the Galvano-Faradic apparatus and employing the interrupted current of low intensity, using my hands as electrodes, and confining the action to the genitals and rectum. This I began to use three times a day. It was followed

by a marked improvement, and in three weeks time he reported himself in good condition for satisfactory duty, and has continued so ever since. The improvement seemed to be due to the electricity.

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Proceedings of Medical Societies.

PROCEEDINGS OF THE BUFFALO MEDICAL ASSOCIATION,
September 5th, 1876.

The President, Dr. Wyckoff, in the Chair.

Members present:—Drs. Gay, Coxe, Abbot, Bielby, Green, Burghart and Hebenstreit. By invitation, Drs. Baker and McCartney.

The Secretary being absent, on motion, Dr. McCartney was requested to act in that capacity, *pro tempore*.

DR. WYCKOFF being called away, DR. Gay was requested to take the chair.

DR. COXE was called on to read the essay of the evening, when it was moved by Dr. Bielby, and seconded by Dr. Abbott, that Dr. Coxe be requested to postpone the reading of his essay until the next meeting of the Association, when there would be a fuller house and consequently a larger appreciation of its merits. Carried.

Reduction of dislocated Hip of two hundred and seventy days standing.—Dr. Gay called Dr. Green to the chair, and reported a case of ancient dislocation of the femur of two hundred and seventy days standing. The patient was a man aged sixty, weighing 180 pounds. He reduced the dislocation and the patient has since done well. Will give a complete report of the case at some future meeting.

Osteo-myelitis of humerus, amputation.—Dr. Gay then presented some bones for the inspection of the members. One was the head of a humerus, with the upper third of the shaft.

The case, a woman 32 years old, suffering with osteo-myelitis of the left humerus, of syphilitic origin. There was an opening

near the elbow, through which a probe could be introduced into the joint. He resected at the elbow, when he found that the medullary substance of the humerus was destroyed. He then amputated near the shoulder; pus escaped, and he could run his finger around in the center of the bone. He then, by Dr. McGraw's method, removed the head, ligating afterwards. The operation was performed three months ago. The patient now has a beautiful stump, with the rotundity of the shoulder preserved.

Necrosis of tibia, exsection.—The doctor also presented a tibia, that he had removed five weeks ago, from a child six years old.

The child had been injured some time previously, and afterwards an abscess formed, and when he examined it he found the tibia necrosed to its full extent, necessitating either amputation or exsection. He chose the latter operation, and at the hospital, in the presence of some of the students, excised the entire bone, with the exception of the upper epiphysis.

Recovery for a time seemed doubtful, but now the patient is doing well, and the doctor thinks the bone will be reproduced.

There was no splint used. The fibula gave all the support that was necessary.

Epithelioma of vulva.—Dr. Green reported a case of cancer of the Labia Majora. The patient was 43 years old, and was operated on by Drs. White, Brush and himself four months ago. The disease reappeared again and again, making it necessary to repeat the operation four times; at one time removing the clitoris and cutting down into the rectum. A part of the time the patient was in a bad state, always having pain, which was sometimes severe, and principally located in the gluteal region, until after the last operation, which was performed five weeks ago. Since then there has been no pain, the patient has improved in appearance, and her appetite has become good. The wound is not yet entirely healed, but looks well, has healthy granulations, and no sign of a return of the disease.

He thinks the operation will prove a success, and strongly advocates operative procedure in such cases.

Prevailing diseases.—The doctor reported Cholera Infantum as

prevailing in his practice; also Cholera Morbus, and some cases of Malarial fever.

On motion, the meeting adjourned.

TUESDAY EVENING, October 3d.

The President, Dr. Wyckoff, in the chair.

Members present:—Drs. Coxe, O'Brien, Brecht, Bartlett, Brush and Howe. By invitation, Dr. McCartney.

The minutes of last meeting were read and approved.

DR. COXE read a paper on the "Toxic effect of Lead."

DR. BARTLETT said he was much pleased with the practical character of Dr. Coxe's paper. Had seen several cases of lead poisoning, and some in which it could be suspected. Saw some time ago a woman, wife of a workman, in the the Cornell Lead works, who had become poisoned, no doubt, by handling and washing her husbands clothes. He thought that much stress should be laid upon the prophylactic measures to be adopted.

On motion, a vote of thanks was tendered Dr. Coxe for his interesting paper.

DR. E. R. BARNES was appointed essayist for the next meeting.

DR. HOWE said that he had a method of illumination to present which he thought would be of interest on account of its cheapness and ease of construction. Dr. Howe exhibited its advantage in the illumination of the eye and throat. It consisted in an ordinary dark lantern fitted over the chimney of a student lamp. To focus the light on the cornea so as to be available in removing foreign bodies, etc., at night, a lense was fitted to the head band of a laryngoscopic mirror on a movable arm, thus leaving both arms of the operator free, when this was used on the patient.

DR. O'BRIEN under the head of prevailing diseases spoke of diphtheria as prevailing to some extent, dysentery and whooping cough were prevailing.

DR. BARNES said as he came in late he would like to ask a question on the subject of the paper. Said he thought insanity from saturnismus was rare; had never heard of a case from professional sources. Recently saw a young man who had been engaged

in painting for *six* months, using a preparation in turpentine. He became insane and was sent to the Providence Asylum and thence to Utica. He had been informed that the authorities, taking the history of the case in consideration, ascribed its cause to lead poisoning, and would like to ask if the author of the paper had seen similar cases.

DR. COXE narrated one case of acute mania of four days duration which he considered due to lead poisoning.

On motion, the society adjourned.

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MISCELLANEOUS.

Suit for Malpractice involving the Surgery of the Hip-Joint. Condensed from the Notes of the Superior Court Stenographer.

This was a suit for \$15,000 damages by Charles Bergman against William Volker, for alleged mal-practice in not detecting and properly treating a dislocation of the left hip-joint of the plaintiff. W. W. Lyon and Mr. Hubbell attorneys for plaintiff. Henry W. Box and L. L. Lewis for defendant.

The grounds of the complaint rested upon the theory that Bergman had a dislocation of the left hip upon the dorsum of the ilium, which dislocation resulted from being knocked down upon his left side by a wagon on Aug. 31, 1875; that Volker was called to attend him on the fourth day of Sept., 1875, and failed to discover at that time, or any subsequent time, a dislocation; that the dislocation remained undiscovered until May 18th, 1876, when it was diagnosed by Dr. Gay, and by him reduced on the twenty-sixth of May.

The defense claimed that there was no dislocation, but on the contrary, an intra-capsular fracture, which at an early date, before separation of the impacted fragments and shortening took place,

might have been easily overlooked, and that the treatment adopted by the defendant, in a man of Bergman's age, viz.: rest in bed, was as good as any. They further claimed that the defendant should not be held liable for damages as he only made four or five visits, at the last of which he declined to assume further control of the patient, not understanding his case.

The first medical witness called by the plaintiff was Dr. C. C. F. Gay.

DR. GAY. I have been a practicing physician and surgeon for a quarter of a century. I first became acquainted with Charles Bergman on the eighteenth of May, 1875. I was invited to see him with Dr. Loomis, of this city. I found Bergman in bed, lying upon his back. I examined him first for disease of the heart, liver or kidneys, to account for the dropsy in his lower extremities, but found none. His limbs were very much swollen and there was an eczematous affection of the skin from the ankles to the knees. I examined him in a sitting posture. He said he had been suffering with great pain. I examined him for a cause. Found the left leg entirely useless. He was unable to move it. On sight I pronounced it a dislocation of the hip. I observed that the left leg was much shorter than the right. It was inverted, the toe turning in upon the dorsum of the right foot. I ascertained that the foot could not be everted or turned out beyond a perpendicular. There was a general immobility of the limb. There was a prominence upon the back of the hip which could not be felt upon the other side. It was above and back of the natural position of the trochanter. I took a tape-line and made the ordinary measurements to detect shortening, viz.: from the anterior superior spinous process of the ilium to the malleolus on either side. These measurements showed a shortening of the limb. Then pointed out these signs to Dr. Loomis, who was my associate. These symptoms showed a dislocation of the hip. They are the usual symptoms to be found in a case of dislocation, "and a wayfaring man though a fool, would not err therein." With these signs present, the natural diagnosis would be dislocation of the hip. From the condition of the man could not tell how long he had had the dislocation; could tell whether it was a recent or ancient dislocation. The patient represented himself to me as a great sufferer at that time, and not able to sleep without an anodyne. His appearance indicated as much. This was the result of the dislocation. Judging from appearances don't think I am able to draw a reasonable conclusion as to the length of time the patient had been in this condition. In general terms, would say a long time. He told me he had suffered nine months. (Objected to and objection over-ruled.) If the indications I have named were apparent when a surgeon was first called in, he should have been able to discover the dislocation

(Objected to on the ground of incompetency. Objection overruled, and exception noted.) The indications referred to were quite as discoverable at the first. A dislocation upon the dorsum of the ilium is easily to be discovered by a competent surgeon. Upon being called to attend in such a case as this, the first duty of a physician is to administer chloroform and after examining the limb, proceed with the aid of assistants to reduce it, if it was found to be a dislocation. Taking a perfectly healthy man, an injury of this kind, with the suffering and confinement it entailed, causing a reduction of vitality, might account for the dropsical effusion in the limbs. The dislocation could not, I think, have produced symptoms of rheumatism. Discovered no rheumatic symptoms at my first visit.

Cross-examined. The dividing line between an ancient and recent dislocation is not easy to fix. The latter must have occurred within a day or two, the former at a more or less remote period, say several weeks. Physical suffering night and day with great mental anxiety, together with taking large doses of opium might possibly have such an effect on the secretions as to induce dropsy. More pain is consequent upon dislocation of the hip than upon fracture of the femur. I have known of cases of ancient dislocations of the femur, but have never had any under my personal supervision. Have treated recent cases. A dislocation of the hip may be produced by a heavy weight falling on a man's back, or by a direct blow from a falling body, or by the man himself falling over on his body. The same direct blow that in one case dislocates a hip, in another may fracture it. It would be more likely to produce a fracture. All fractures are not easily detected soon after injury. A fracture of the neck of the femur may not show shortening immediately. Have never seen partial fractures of the femur. Fractures of the neck of the femur in old people have been produced by muscular action alone. A case of a recent fracture within the capsular ligament without a separation of the bone, would be difficult to detect. There would be no shortening except through gradual absorption. Have known cases of fracture of the neck of the femur where, in several weeks, shortening began to take place. On Friday last (Oct. 13) saw the patient. There were present, upon my invitation, Drs. Winne and Barnes; Dr. Moore, of Rochester, the two Drs. Miner, Dr. White and Dr. Rochester, of this city, and Dr. Nichell, of California, were also present. Measurements of the patient's limb were taken by myself, Dr. Moore, Dr. White, Dr. Julius F. Miner, and Dr. Rochester. The latter did not declare the result of his measurement. I don't swear that I reduced the dislocation of the limb. I did manipulate the limb with a view to reducing it. I don't remember that I measured the limb previous to this. It was measured previously. Cannot swear positively, but think I am safe in saying it was by Drs. Burwell, Hauenstein, Diehl, Hopkins and Bartow. I took no part in their

efforts, wishing each to decide for himself as to the diagnosis. Did not see their measurements. Have not reported the case. Have made a rough sketch of it. I claim there was a shortening of about two inches or two inches and a half when I went to reduce the dislocation. Asked the patient if he had ever noticed that one leg was shorter than the other. This was upon the occasion of my first visit to him. He said he had not. Asked him, I think, if he had ever suspected that his leg was dislocated. He said "No." I did not have a very fair opportunity of making any measurement on Friday, but will say that I found the shortening less than the average given by the others. I neglected to note down my measurement. You may call it an inch and a half, if you please. Dr. White's varied from $2\frac{1}{2}$ of an inch to 3 inches, Dr. Moore's was 2 inches, Dr. Miner's $2\frac{1}{2}$ inches, and $2\frac{3}{4}$. I will place mine at an inch and a half. The measurement of the injured limb from the major trochanter to the superior spinous process of the ilium by Dr. Moore, was $4\frac{1}{2}$ inches on one side, and $5\frac{1}{2}$ inches on the other. This would indicate dislocation of the hip. I suspect that the hip is now dislocated. Did report to the medical society in September last, orally, that I had reduced the dislocation. Presume that I have made the same statement to others. Have given no facts to any medical journal. Did claim before the American Medical Association in Philadelphia, that I thought I had reduced a dislocation of nine months' standing. My opinion as to the result of my manipulations has not been changed. Have suspected from time I was first called to see Bergman, that the head of the bone was out of the socket, and had taken plenty of time to determine this point. Have kept this to myself. The examination of council of physicians was after you (Mr. Box) had expressed a desire to have a council. Think I took Dr. Loomis, Dr. Winne, Dr. Wetmore and Dr. Bartow. Think that very likely I claimed I had reduced the dislocation. Did get them to subscribe to a paper relating to certain things, which was drawn up by Dr. Bartow, acting as my amanuensis. Did not hint at a suspicion that there was still a dislocation. Don't remember that I claimed a reduction in positive terms. I might have done so. Did claim that I had made the reduction before Dr. Miner, Dr. Rochester, and the other physicians. My language was, "that I had reduced the bone." Have been led to believe that there is still a dislocation by a more recent examination, made yesterday (Oct. 13). After the Bergman-McArthur trial, went to reduce the dislocation. Told the physicians Friday that I felt I had reduced the dislocation. After the attempted reduction I visited Bergman from 34 to 44 times. From the twenty-seventh of May last, up to the present time. Find the patient's leg still with a tendency to inversion. Did claim on Friday that the reduction had been accomplished by me, and accounted for the shortening by saying that I believed the head of the bone to have been absorbed. The

difference caused by the tilting of the pelvis should be subtracted from the actual shortening of the limb. Found symptoms present yesterday (Oct. 15) to indicate a dislocation. My opinion now is that the man's hip is out of joint. Discovered the positive signs yesterday. The measurement yesterday from the major trochanter to the middle line of the body (the spine) showed a difference of $\frac{3}{4}$ of an inch; it was $\frac{1}{4}$ of an inch nearer the middle of the sacrum than on the right side. Another sign present was the arch formed by the lower portion of the spinal column. Do not think this would be found in a case of fracture of the neck of the femur. When the patient lies on his back with the limbs extended the arch is present. It disappears when the limbs are flexed. Think the head of the bone is now in the ischiatic notch. The limb with reference to motion is now nearly as perfect as it would be if the head were in its proper place in the acetabulum. If it were still on the dorsum of the ilium the limb would be shortened with a tendency to inversion more than at present. When the head is permanently removed from its natural position there is a tendency on the part of nature to fill up the acetabulum.

Re-direct. A physician of ordinary capacity ought to have discovered within a week or two that there was a fracture had one been present. When the neck of the femur is broken and retained in its normal position there would still be crepitus. I have never seen a partial fracture of the neck of the femur. In a case of impacted fracture the shortening might not be discovered for some weeks. It is generally harder to reduce an ancient dislocation than a recent one. It frequently happens in an attempt to reduce a dislocation from the dorsum of the ilium that the bone is put into the ischiatic notch, and it is always necessary to be very careful to avoid that. After my attempt at reduction the signs of dislocation were entirely removed. It looked as if the head of the bone had slipped into the acetabulum. The legs were stretched down to an equal length. The left foot was naturally everted. In three days the pain and swelling began to abate.

Cross-examined. The signs of dislocation into the sciatic notch are not so prominent as upon the dorsum of the ilium. There would be shortening, but not so much. I did not discover any shortening after my manipulation. In stating my account of the operation last Friday I remarked that I made use of measures to prevent the bone from slipping into the ischiatic notch. Dislocations into this notch have been considered very difficult to reduce, and in the reduction of the dorsal dislocations every effort is made to prevent the accident. After the fourth or fifth attempt at reduction I had become very much exhausted, and in the last effort Dr. Bartow said we must not get this into the ischiatic notch. I then said: "Ischiatic notch or no, I shall rotate this limb inward and lodge it in the ischiatic notch rather than leave it where it is." I considered it better to do so or he would have been a cripple for

life. No man can swear positively whether it is in the acetabulum or not. If it had been a fracture, instead of one and a half inches shortening he would have had a limb four inches short, because no pains had been taken to keep the limb from becoming short. The modern school of surgery approves of no extension in fracture of the neck in old persons. I am willing to swear that there was no fracture in this case.

Re-direct. When the bone has slipped into the ischiatic notch the surgeon is advised to let it remain there. No surgeon, in this case, would have been justified in making further manipulations. I do not wish to be misunderstood. I say I suspected from the time of the operation to this, that the head of the femur was in the ischiatic notch, but hoped it was in the acetabulum. No surgeon in the world would be able to detect a dislocation in this case without the closest scrutiny. All the symptoms of dislocation have disappeared except shortening. I do not wish the jury to think there are no signs that point to a possible reduction into the acetabulum, but I think there are unmistakable symptoms that it is in the ischiatic notch. I have looked at it from time to time and hoped it was in the acetabulum, and measured him to see if there was dislocation into the ischiatic notch, but when he was so comfortable I regarded it as good surgery, even in such a case, to let him entirely alone.

To Mr. Box. I have the authority of the first surgeon of the United States, Dr. Gross, of Philadelphia, to explain shortening after reduction. I have received a letter from him since going on the stand, and he tells me shortening can be accounted for in cases of ancient dislocation.

At this point the plaintiff rested.

The first witness for the defendant was Geo. Mesmer, who swore that he was present at the time of Volker's first visit to Bergman. That he assisted him out of bed, and that with his hand supporting him on the left side, Bergman was able to walk across the floor touching both feet to the floor; the toes, at least, of the left foot resting squarely on the floor. He complained of pain through the hips, and in the body in general.

DR. HENRY C. FROST. I am twenty-eight years of age. Graduated in Cleveland, afterward went to London, Eng. First saw Mr. Bergman in March last. Was called by Mr. Lyon. Made an examination for cause of dropsy. Found him in a sitting posture. He could not lie down on account of difficulty in breathing in that position. Complained of pain in his limbs. There was tenderness in region of right kidney, and over liver. Nothing attracted my attention to the hip. Saw nothing but the dropsy out of the way in the limbs. Again saw him in May last. My attention had been called to a claim of there being a dislocation of the hip. The patient was lying down in bed. Noticed an apparent shortening of the left limb. The foot was in its normal position.

The limb lay flat on its posterior surface. Could move it outward and inward. He complained of shooting pains in his limbs. On bending the thigh could not feel the head of the bone on the dorsum ilium, nor in any other position could I feel it. The limb was capable of making such movements as to exclude the hypothesis of dislocation.

Cross-examined. By Mr. Lyon. My diploma is dated in 1873. Told you (Mr. Lyon) that there was no dislocation of the hip, in a conversation we had together after my examination. There was some resistance when I flexed the limb. Can examine the lower part of the spinal curve by placing my hand upon it, without turning the patient over in bed. Was satisfied, after my last examination, that there was a fracture of the neck of the femur; attributed the dropsical affections to disease of the heart.

Re-direct. By Mr. Box. Fractures of the neck of the femur are more apt to occur in elderly people than dislocation. From the manner in which the accident occurred to Mr. Bergman, and the violence of his fall, together with his age, I would say that it would be more more apt to produce a fracture than a dislocation.

DR. JOHN D. HINEMAN. Reside in Buffalo. Know Charles Bergman. Have treated him as a patient. Commenced to treat him first in February last. Had charge of him up to lately; two or three weeks ago. Remember the Bergman-McArthur trial. The last time I saw him, previous to the trial of that case, he was getting better. Treated him from February up to that time. He took to his bed about two months after I was first called. The pain in his limbs, especially the left, would not permit of his lying down at that time. Saw him the next day after he tried to kill himself. He was lying on the lounge at the time he attempted suicide. Told me he had cut a blood vessel and held a basin to catch the blood. When it was about full he fainted away, and the basin falling to the floor, alarmed the lady in the house and she coming in discovered his condition. I know nothing about his falling off of the lounge. After the operation by Dr. Gay, he was worse. I was sent for. Don't recollect who came for me. Think I was informed by a postal card. The pain was getting less and the dropsical affection becoming worse. Saw his limbs in bed frequently, before and after Dr. Gay was there. Never saw any inversion of the foot. If there had been any such thing, think I should have discovered it.

Cross-examined. By Mr. Hubbell. Mr. Bergman said he attempted suicide because he would rather die than live in such pain. I could not at first detect dislocation or fracture, in consequence of the dropsical swelling. He had also Eczema. Do not call dropsy a disease of itself, it is a symptom of a disease. In Bergman's case, after Dr. Gay performed the operation for reduction, it was some weeks before Bergman was as well a man as he is now. He was improving nicely previous to this, but had not gotten up out

of his bed. Knew nothing about the operation by Dr. Gay. I was not consulted. Think I noticed slight crepitus. When I first saw Bergman, he was helpless to a considerable degree.

By Mr. Box. My patient was not benefited by Dr. Gay's operation. It was doubtful as to his recovery, for quite a while.

DR. W. W. MINER. Am twenty-eight years of age. Have charge of the Sisters of Charity Hospital, as surgeon. Dr. Julius F. Miner is my uncle. Was called to see Mr. Bergman Nov. 6th. Saw him at his home. He was sitting on a lounge. Made examinations necessary to answer my purpose, as a physician called to prescribe for a patient. Found dropsy of the limbs and abdomen. He was suffering from the inconveniences of dropsy. Never saw a man whose tissues were so distended. He complained of pain and inability to lie in bed. Said he had met with an accident. He did not speak of pain in any particular part of his body other than the extremities. Endeavored to have him lie down on the lounge and straighten his limbs. It was impossible for him to do so. Looked for trouble with liver and secretions, to find cause of dropsical effusions. Both of his feet were on the floor. Noticed nothing abnormal in their position. Do not think it possible for a patient with a dislocated hip to sit in that position. From the history of the case I received and from my examination with the symptoms discovered, came to the conclusion that the man was suffering from extreme dropsical effusion. On another occasion went to see him with Dr. Julius F. Miner. Discovered no signs of dislocation or fracture. The first I heard of the trouble with hip was after the Bergman-McArthur trial. Visited him and found shortening of the left leg. Other signs of dislocation were absent. His position in bed was such that a man with dislocation could not assume. His knees were lying evenly together. There was no resistance to eversion. There was freedom from restraint in this respect. Was satisfied that the condition was not that of dislocation.

Dr. Gay claimed, on Friday last, that there had been symptoms of dislocation, and that he had reduced it. Saw Mr. Bergman shortly after it was said Dr. Gay had claimed to have reduced the dislocation. Found he had an extension on his left leg. He at first refused to let me look at it. His daughter persuaded him to do so. The leg was shortened. Could see evidences of this as he lay in bed. Was present when measurements were made last Friday. After Dr. Gay's manipulations, as he lay in bed, his leg did not look as short, with the extension on. The extension is to preserve the natural length of the limb.

Cross-examined. By Mr. Hubbell. I have no permanent connection with the Medical College. Have no relation with my uncle in the way of business partnership. Do not office with him. Did not decide upon the cause of the dropsy at my first examination, but was satisfied of some organic disturbance. Neither my-

self nor Dr. Julius Miner knew of a fracture or a dislocation until Dr. Gay reported that he had reduced a dislocation. Last Friday I came to the conclusion that there was pretty strong evidences of a fracture of the neck of the femur.

DR. JULIUS F. MINER. My attention was first called to the case of Bergman, Dec. 11th. Went to see him with my nephew. Found him sitting on a sofa, with his feet upon the floor, in an easy and natural manner, and both legs greatly distended. Asking for a history of the case no clew was given that afforded a satisfactory explanation of the cause of the dropsical effusion. Heard nothing about any injury to the man. Patient said very little and did not complain of one leg above the other. There was nothing seen in the appearance of the legs to indicate a fracture or dislocation. A dislocation upon the dorsum of the ilium throws one leg over so that one foot rests on the other. On Friday last laid patient on the table and measured from the anterior superior spinous process of the ilium down to the ankle joint. The most careful and critical examination to be made showed a shortening of two inches. The patient was somewhat more difficult to measure than a lean man. The shortening was located, by measurement from the major trochanter to the point of the ilium, in the neck of the femur, and not in the shaft. Found no evidence of dislocation upon the dorsum of the ilium or in the ischiatic notch. Other symptoms were mobility of the leg and smoothness of the joint surface, that there is no dislocation. Dr. Gay claimed in my presence on Friday last that he had reduced the dislocation. There is not more difficulty in detecting dislocation upon the dorsum of the ilium than in the ischiatic notch. It can be detected. I can swear that there was no evidence on Friday last of Bergman's having any dislocation in the ischiatic notch. The symptoms to indicate this are shortening and the presence of the head of the bone in the notch. The manner in which this patient was injured would not produce a dislocation. It would cause a fracture, an impacted fracture, or a fracture of the neck of the femur. Old men and women almost always fracture the neck of the thigh-bone when they fall down, instead of producing a dislocation. Dislocation is almost unheard of in such cases. There are cases of fracture of the neck of the femur where there is no laceration of the capsular ligament or injury to the periosteum. The natural tendency of the muscles in the cases of dislocation is to draw the bone up. There are cases of the fracture of the neck of the femur difficult to determine at first. A good surgeon is liable to fail to discover it. Shortening comes on slowly. The lounge Bergman sat upon when I saw him was low. Falls of a short distance sometimes fracture the bones of old people. On the night that he attempted to commit suicide a man being faint and coming down off the lounge with force, as it is said he did, and striking the trochanter without muscular intervention, a fracture of the femur might result.

Cross-examined. By Mr. Hubbell. Have known Dr. Volker fifteen or twenty years. He was one of my earliest acquaintances in Buffalo. He was then a laborer on Jefferson street. Left the case after examining for the cause of dropsical effusion, until last Friday, when, upon making an examination, I had no difficulty in determining that there was a fracture of the neck of the femur. Had no reason then, nor have I now, to suppose that the head of the bone had ever changed its position. Think it would be possible for a competent surgeon—an expert—to discover a fracture of the neck of the thigh-bone. He would, first, upon making the discovery, place the patient in bed, and in old people it would be safer and quite as well not to use splint, pull or dress them too much, and allow nature to take its own course. If the patient was suffering great pain, the best thing that could be done would be to give him relief with anodynes if he can bear them. Dropsy might follow from inactivity and feeble condition of circulation. If dislocation produced same condition of system, then dropsy would also ensue. If at my first examination I had known of an injury to the hip, and found a fracture or dislocation, then I might have accepted that as inducing the dropsical effusion. Drs. Moore, White, Rochester, Winnie, Gay, Barnes, Nichell, and W. W. Miner were present last Friday at the examination. If the patient did not tell the doctor about an injury when he called, the best surgeon might go away without discovering a fracture or dislocation, though it were there. If a man were suffering with great pain about the hip and limbs, a good surgeon should make a physical examination.

Re-direct. By Mr. Box. The weight of the body can be born upon the foot when the fracture is entirely within the capsule. The patient can also move about. Around the neck of the femur there is what is called a capsular ligament, which covers the head of the bone, and is so astonishingly strong, that use of the limb is permitted until inflammation sets in, when the soreness is such that immobility insues.

By Mr. Hubbell. When the head of the bone is thrown out of place, the socket might fill up, and the dislocation being reduced it is more apt to occur again, than at first.

DR. THOMAS F. ROCHESTER. I assisted in examining Bergman on Friday last. In the first place we had a history of the case from Dr. Gay so far as he knew. He then described certain conditions he found and the inferences he drew therefrom. He said he had found dislocation upon the dorsum of the ilium, which he had reduced by manipulation. The patient was then placed upon the table and critically examined. The result was that shortening of the left leg from two to three and one-half inches, was found. I came to the conclusion that the man had no dislocation. The history of the case, the nature of the accident, the manner of the fall, the age of the person (this is very impor-

tant), and the measurement, with the shortening, showed that there had been fracture of the neck of the thigh-bone.

The balance of Dr. Rochester's testimony was corroborative of that of Dr. Miner, and all the previous witnesses of the medical fraternity, called in the defense.

DR. A. R. WRIGHT testified that he had visited the patient February, 1876. That the position of the limbs was natural. That his attention was not especially called to any special troubles with the hip.

Testimony was also introduced at this point to show that the patient had not fallen from the the lounge, that accident having been spoken of as liable to cause the fracture.

DR. CONRAD DIEHL. Am a physician and surgeon of ten years practice. Was present at the claimed or attempted reduction of the asserted dislocation. The patient was upon the lounge with both limbs extended and under chloroform. I had no history of the case, and as I came into the room, upon invitation, I examined the limb. The legs were both apart. There was no inversion of the injured limb, and but little of the foot. Dr. Gay, with assistance, proceeded to make his manipulations for reduction of dislocation, which he continued for about an hour.

The testimony of the defendant, William Volker, introduced at this time, showed that he was uneducated and wholly incompetent to practice medicine. He testified that he was called Sept. 4th, 1875, to see Bergman, to treat him for rheumatism. That he made an examination while he was standing up, and noticed nothing wrong in the position of the limbs or appearance of the hips. He was not asked at that time to take charge of the patient, and did not visit him until sent for at the expiration of about a week. Two or three more visits were paid to the patient, at the last of which he declined giving further attendance as he did not understand the case. As the patient was complaining still of soreness, he advised him to get on crutches, if possible. This was from two to three weeks after the injury.

DR. JAMES P. WHITE gave a detailed account of the examination of the plaintiff by Drs. Miner, Moore, Rochester and himself, the commission appointed by the court. The plaintiff was first made to walk across the room, and when his back was turned he could recognize the deformity which would be produced by a fracture of neck of the femur. He made such measurements as to satisfy himself that the limb was over two inches short; measuring from the anterior superior spinous process of the ilium to the maleoli, on either side, these points being fixed by the thumbs of physicians present. He then measured from the trochanters on either side to the ankle joints, and the measurements agreed, showing that the shaft of the bones was not fractured. Measurements made by others present showed that the trochanter was one-half inch nearer the spine of the ilium than on the right side.

Manipulation of the limb, rotation, absence of inversion, etc., satisfied me that there was no dislocation, that the head of the femur was in the acetabulum, but that the neck had been fractured. In intra-capsular, and especially impacted fracture, the shortening is not at once made very manifest. I recently saw a case in Oneida county which illustrates this. Dr. Brush was with me at the time. A lady fell injuring her hip, but no displacement was detected. In the course of some weeks, three or four, shortening began to show itself, and the family were inclined to blame their physician for not detecting it in the first place. He was a well informed practitioner, and had carefully watched the case.

Dr. White's testimony, which was given in careful detail, was corroborative of the other medical witnesses of the defendant, that there had been a fracture of the neck of the femur, and that the head was now in the acetabulum.

The only remaining medical testimony called was Drs. Hopkins and Barton for plaintiff, and Dr. Miner, recalled for defendant.

DR. HOPKINS testified as follows: I reside in Buffalo, and am a practicing physician and surgeon. I know Bergman, the plaintiff. I first saw him about the twentieth of May, 1876, and at that time I made an examination of Bergman, as thoroughly as I could. I was not present at Bergman's house last Friday, but I saw him on the Sunday following. I made an examination, and in general terms determined his condition in presence of Drs. Gay, Barnes and Bartow. I would state that Dr. Gay asked me to see Bergman with him at that time. I examined Bergman to seek to account for the shortening of his limb. I was present at the operation of Dr. Gay in the attempt to reduce the dislocation. It would be improper for me to give an opinion on this case unless I am allowed to state what I observed at the time of the attempted reduction.

By the Court. Just tell the examination you made on Sunday last in the presence of these gentlemen.

We found Bergman with a shortening of the left leg of about two inches, and I was asked by Dr. Gay to account for this shortening. There were two theories which might account for it. The first was that the man was laboring under a dislocation, and the second was that he was suffering from a fracture. I first examined him to ascertain whether a fracture could account for his condition. We stripped the man, and laid him down upon the floor, upon just one comforter, and laid him flat upon his back for our examination. I found, upon measuring his left leg, that it was about two inches short, but to be as sure as possible, I called it one and a half inches, and I found the lower part of the back bent forward slightly. I found that as his left leg laid upon the floor you could pass your hand under it without touching it, from the knee to the hip. That it was raised up off the floor while the opposite leg lay upon the floor—from point to point it touched the floor. I then turned my attention to the manipulation of the limb. I

found that the head of the bone rotated very naturally—almost the same as the other side. I also found that by measuring from the anterior superior spinous process of the ilium to the trochanter, that it was a little shorter on the wounded side than on the other side. I turned him over on his belly. He objected at first and seemed not inclined to be troubled. I insisted, and he then allowed himself to be turned over. I then measured from fixed points on both sides, from the trochanters to the median line of the body. I made four measurements. I made a difference of three-quarters of an inch to one and one-eighth of an inch—the wounded limb approached nearer to the median line of the body by about that much. I would also say that at a subsequent time I measured this man from the top of the trochanter to the tuberosity of the ischium, and I then found that on the injured side it was a little nearer, say three-quarters of an inch nearer than it was on the other side. From these facts I theorized in this way: In the shortening of the limb there are two ways to account for it, either the hip bone is out of place, or the neck has been broken and allowed the muscles to pull the shaft of the bone out of its place. These are the conditions which could account for that. I decided that the head of the bone was out of its place, for the following reasons: In dislocation into the sciatic notch, the head of the bone assumes nearly a natural position, as you will see it is nearly on the same line up and down (showing the bones). It makes a very fair socket. If the head of the bone is in the sciatic notch it makes a very good acetabulum, and the head will rotate. If the neck of the bone is fractured so as to allow the limb to shorten about two inches, this thing will result (showing the bones). We will draw from the centre of the neck a line two inches. In case of fracture of the neck of the femur, where the limb is shortened two inches, and union takes place this thing must result. The neck of the bone comes down, and is attached to the shaft two inches below. From the shortening of the neck which always attends fracture of the neck, and its union in this new place free rotation is not possible. In case of union by ligament, with shortening of two inches, the head of the bone cannot be moved in its socket, and to take hold of the limb you can scarcely raise the limb from the floor but it will strike. You cannot rotate it or it will strike here (showing the bones that with two inches shortening the head would, if union occurred, be attached two inches lower than its natural position, and in turning the limb out the femur above would strike against the ilium). In such a case you might perhaps move it an inch this way or that way, but there is no possibility of anything like rotation. My point is, in a fracture, to account for two inches shortening, with union of the fractured neck, there would be no possibility of rotation, for the reasons I have given. It would be glued right on the bone, and you could not rotate it from its position. All the sigus

in the case point conclusively to a dislocation into the sciatic notch: the tipping up of the limb; the arch formed by the lower part of the spine; the mobility of the limb, showing it had a very good acetabulum, are the most positive and unequivocal signs of dislocation into the ischiatic notch. The approach of the tip of the trochanter towards the anterior spinous process about half an inch, towards the median line three-quarters of an inch, and towards the tuberosity of the ischium about say about three-quarters of an inch, are likewise all evidences. Professor Hamilton in his work on "Fractures and Dislocations" says: "Sir Astly Cooper remarks that this is the most difficult dislocation to detect and reduce, and Mr. Syme mentions a case in which the nature of the accident was overlooked by himself, and the thigh was not reduced until the thirteenth day, and subsequently Mr. Syme has called attention to what he considers as one of the most important diagnostic marks; indeed, he says it is never absent, nor is it ever met with in any other injury of the hip-joint, whether dislocation, fracture or bruise; this is an arched form of the lumbar part of the spine, which cannot be straightened so long as the thigh is straight, or on a line with the patient's trunk." (That is if you lay a man on his back and keep his thigh straight.) "When the limb is raised or bent upwards upon the pelvis, the back rests flat upon the bed; but so soon as the limb is allowed to descend, the back becomes arched as before." Dr. Hamilton says further: "That the trochanter major is approximated toward the anterior superior spinous process of the ilium." In Bergman's case I found the lumbar part of the spine arched, and I state that you diagnose between a fracture, and a dislocation into sciatic notch by taking the measurements which I have enumerated.

On cross-questioning, Dr. Hopkins said: That he had a notion since May 26th, the time of the operation, until last Sunday that the head might or might not be in place. Did not consider it necessary to back up Dr. Gay in his opinion of a successful reduction, on the contrary, Dr. Bartow and myself made up our minds that it was necessary to break Dr. Gay down in his opinion. We all changed opinion at the same time, the signs all indicate that he has sciatic dislocation. I might have said in conversation that the dislocation had been reduced, but do not remember having done so.

DR. BARTOW was called by the plaintiff. His testimony was chiefly corroborative of that of Dr. Hopkins with reference to there being sciatic dislocation. Said he had intimated in the interim between the twenty-sixth of May and Sunday last that the bone might not be in place, but Dr. Gay paid no attention to this suggestion.

Dr. Miner re-called. I have heard the testimony of Dr. Hopkins with reference to his opinion of the present lodgment of the head of the femur, and in which I understand him to say that he

found the distance between the anterior superior spinous process of the ilium and the trochanter major to be one-half inch shorter on the injured side than the other. That agrees with my measurement. He also says that from the measurements which he made the trochanter is nearer the median line of the sacrum, and also the tuberosity of the ischium—so that he makes it nearer to three points at the same time which is mechanically impossible. There is but one possible condition in which it can be nearer the median line and also to the spinous process of the ilium, and that when the bone is broken and driven up—that is driven up or raised up nearer to both of these points. This bone here is drawn up by the muscles whose force is very great. Something has been said in reference to it being on the sciatic notch, that is impossible. If it is out of the notch it would be drawn up upon the dorsum of the ilium. It is a mechanical impossibility for it remain on the notch. It must be in the notch or drawn up on the dorsum of the ilium. With reference to rotation: If the head of the bone is in the notch the leg is turned in and the man walks with his foot turned in, and finds difficulty in getting the leg forward if he walks quickly. The toe is turned in on the dorsum of the other foot.

By Mr. Box. They speak about where there was a fracture of the femur, and where, if the bone should shove up, it would make some five inches shortening. Is there not such a thing as bony union?

A. Where the neck was fractured, within the capsule, some surgeons formerly claimed that no bony union took place; but the ground is being abandoned. In numerous cases, I think, it is united by bone, and where united it is just as perfect, excepting short, and the ligaments are the same as in the normal limb. The leg is shortened, but the fracture does not prevent the movement upwards, outwards, inwards. The head is not carried down upon the shaft to the full amount of the shortening; the neck unites by bone or ligament in nearly its old position, the shortening is at the expense of the neck and not by the shaft being pushed up to any great extent—you have it all. We found it all perfect in this case. In no dislocation into the sciatic notch could he turn his leg out—it is entirely beyond the region of human possibilities.

Mr. L. L. Lewis summed up the case for the defence, Mr. Hubbell for the plaintiff, after which the charge was given to the jury by Judge Clinton.

The judge carefully charged the jury as to the responsibilities of a medical man, his duties to his patient in the case, etc., after which the court took a recess of fifteen minutes. At the conclusion of the recess the jury came in and rendered a verdict of "no cause of action." The clerk was directed to record a verdict for the defendant.

Remarks upon the Enucleation of Uterine Fibroids, with Illustrative Cases.

By T. GAILLARD THOMAS, M. D.

One of the most valuable contributions made by America to gynecological surgery, emanated from W. L. Atlee, in reference to the management of sessile sub-mucous and intrestitial uterine fibroids. In the year 1853 he presented to the American Medical Association an essay entitled "The Surgical Treatment of Certain Fibrous Tumors of the Uterus heretofore considered beyond the resources of Art." This essay received the prize of the association, and to-day stands as the pioneer article in the surgical literature of these grave and often irremediable cases.

Both in this country and in Europe the lead of this bold surgeon has been followed, and the method which he advocated a quarter of a century ago, and which slowly battled with a pretty decided opposition has come to be recognized as a legitimate surgical resource.

If I may be allowed to epitomize the views of Atlee, as published in 1853, I would do so in these three propositions.

First—If a non-pediculated tumor cannot, from the nature of its attachment and envelopes be expelled or drawn by mechanical means through a dilated os uteri, it is advisable to make by the knife a means of escape for it into the uterine cavity, through its capsule or enveloping tissues.

Second—If the tumor, thus offered an outlet, cannot be removed, it should be forced into and out of the uterine cavity by persistent use of ergot and cutting the cervix.

Third—The tumor, once coming within reach, it should as soon as practicable be enucleated and removed by the surgeon.

That this method of treating such cases is attended by the great dangers of septicæmia, peritonitis, hemorrhage, and exhaustion, is not to be denied. But it must be borne in mind that while heroic interference is environed by risks, a Fabian course of non-interference and inactivity is by no means a safe one. The growing tumor creates exhausting hemorrhage, dangerous mental depression and anxiety, and interference with the functions of nutrition and excretion, which slowly drag the patient down to death. Interference should not be practiced unless impending danger urges a resort to it. Cases selected by this rule commonly end in recovery, while non interference commonly results in death.

Although many surgeons here and abroad have, as I have already said, followed the lead of Atlee in this matter, it is still of importance that a fair report of cases thus treated should be made in

order that those believing may be strengthened, and that those doubting may be convinced. In this spirit I report the following cases.

CASE 1.—Large Fibroid expelled through opening made in its capsule.

Mrs. C., residing at Red Hook, N. Y., æt. forty years, been married thirteen years, the mother of one child eight years of age, called upon me by advice of Dr. Bates, of Rhinebeck, and gave me the following history of her case. Four years ago her menstrual periods had ceased for six months, and she began to think that the menopause or pregnancy had occurred, when suddenly they reappeared. At the same time she was disturbed by noticing that her abdomen was enlarging.

From this time the menstrual discharge became profuse, the health depreciated and the strength greatly diminished. The abdominal enlargement steadily increased meanwhile, and at the time that she applied to me, my note book records it as being "as large as in utero-gestation between the seventh and eighth months."

Upon her visit to me, on the 9th of June, 1875, I found Mrs. C. very pale, thin, weak and bloodless. The appetite was poor, digestion feeble, pulse rather weak and rapid, and the patient's mind much depressed about her condition.

Physical examination revealed the upper portion of the cervical canal expanded as at the commencement of labor, the walls of the cervix thin, and a tumor filling the cavity above, and firmly attached to the walls of the cervix, except on one side, the posterior. The uterine sound on this side passed up about five inches, but everywhere else the growth was attached all the way down to the lowest portion of the cervical canal. The tumor which presented was rather soft, and I suspected that it might be fibrocystic instead of purely fibrous. The uterus had, from the history of the case, evidently made determined efforts to expel it; but on account of the resisting envelope, had entirely failed in doing more than dilating the os externum.

The patient being unwilling to remain in town, I decided, *First*, To pass a large aspirator needle into the mass, to ascertain if it contained spaces filled with fluid. *Second*, If it did not do so, to make an opening into the capsule which would constitute an artificial os for the mass. *Third*, To give ergot steadily to excite expulsive efforts on the part of the uterus to force out the growth.

Accordingly on the 10th of June, with the assistance of Drs. H. F. Walker, and S. B. Jones, Jr., this course was inaugurated at the patient's hotel, and on the next day she returned to Red Hook without inconvenience.

I did not hear again from her until a fortnight afterwards, when she wrote that ever since she had returned home, she had suffered from uterine pains of intermittent character, and slightly bloody flow of a disagreeable odor.

From her attending physician, I subsequently ascertained the progress of the case. The pains referred to steadily forced down the tumor through the opening made in the capsule. It presented exactly as a child's head would have done, and after between two and three weeks of a process closely resembling labor, it distended the perinæum and by a very firm traction on his part, was delivered. During this time, a most offensive odor was given forth by the mass, and the patient suffered from a certain degree of septicæmia. Unfortunately the tumor which was large, decomposed, and almost diffident, was not weighed.

Subsequent to this, Mrs. C. entirely recovered, and now, one year afterwards, is, I believe, in good health.

I neglected to say that the attempt at aspiration yielded no fluid whatever. It is probable, however, that the acupuncture resulted in the partial death of the badly organized mass and aided materially in exciting expulsion.

The second case which I shall record was seen in consultation, and as a report of it, made by the attending physician, has not been published, I avail myself of his kind permission to employ his manuscript here.

CASE 2.—Sub-mucous Uterine Fibroid. Uterine contractions excited by ergot. Tumor enucleated by Prof. Thomas. Reported to the District Medical Society of Bergen County, New Jersey, by Chas. Hasbrouck, M. D.

Mrs. A., aged forty, first menstruated at fifteen, married when twenty years old; has had four children, the eldest nineteen, the youngest between ten and eleven years old; never had an abortion or miscarriage, and until recently never had any serious illness. Previous to the birth of her last child, Mrs. A. always enjoyed robust health. In the winter of 1863-4, a few weeks after the birth of her last child, and before she had recovered fully from the puerperal condition, her husband had an attack of typhoid fever and was very ill for several weeks, and Mrs. A. became very much worn down from protracted watching, fatigue and anxiety. Soon after this, she began to suffer from sleeplessness and general nervous irritation. Her appetite remained good, and her nutrition seemed perfect, with rather a tendency to the accumulation of fat; her menstrual functions were regular and without pain or any abnormal symptom; she never had leucorrhœa, backache, nor any other symptom of uterine disease. But at the same time she continued to suffer from general nervousness, sleeplessness, and neuralgic pains in the back of her head, shoulders and chest, down to the waist. Her spine was more or less tender, and she sometimes had a nervous, dry cough, and sometimes vomiting, and almost constantly suffered more or less from the protean forms of hysterical disorders. During all this time her menstrual functions were naturally performed, and on careful examination, by touch and by the speculum, no uterine disease could be discovered.

In 1868-9, Mrs. A. began to menstruate rather scantily, although regularly as to time, and became more and more nervous, requiring almost the daily use of chloral-hydrate and bromide of potassium to relieve her nervous disorders and wakefulness.

In 1870-1, she began to menstruate more freely. The catamenia continued to recur at the regular time, and continued to be free from any kind of suffering, but they gradually became more and more profuse, until finally it amounted to actual menorrhagia and began to tell upon her strength. This condition continued for several months before my attention was called to the fact; and increased debility, and aggravation of her sleeplessness and general hysterical distresses were the results.

Finally, during the past summer, 1873, my patient called my attention to the fact, that notwithstanding her increasing debility, and very appreciable emaciation, there was a noticeable increase in the size of her abdomen; and on examination, I discovered a distinct circumscribed tumor in the hypogastrium, symmetrical, or nearly so, in form, and about the size of the uterus in the fifth month of pregnancy. The tumor was evidently uterine.

By the persistent use of astringents and perfect rest in the horizontal position during the menorrhagic flow, and of tonics, quinia and iron, during the intervals, the amount of the hemorrhage was very materially lessened, and the general health of the patient improved. But the hypogastric tumor remained, and perhaps increased very slightly in size, disturbing the patient's mind and interfering with her general comfort.

November, 1873, I got Prof. T. G. Thomas, of New York, to see Mrs. A., and after a careful examination he expressed the opinion that the tumor was undoubtedly uterine, and most probably a uterine fibroid. But in view of the fact that it might *possibly, but not probably*, be one of the rare cases in which pregnancy existed with regular menstruation, he declined to risk the danger of resorting to the use of the probe or uterine sound, which was necessary to perfect the diagnosis, until about six weeks or two months had elapsed, by which time the existence or non-existence of pregnancy would be developed with entire certainty.

February 20, 1874, Prof. Thomas again saw the patient, the uterine tumor had increased slightly in size, but the non-existence of pregnancy being sufficiently evident, he did not hesitate to use the sound, and found the uterine cavity to measure about five inches. He diagnosed the presence of fibroid tumor of the uterus of the sub-mucous variety; and advised the persistent use of ergot, in the hope of starving out the tumor, or at least, retarding its farther developement by diminishing its blood supply; and in the farther hope that the uterus might be induced to take on expulsive action and expel the morbid growth. In accordance with this advice, I gave Squibb's solid extract of ergot in four grain doses three times a day, beginning February 21, 1874.

March 2, Mrs. A., began to suffer from severe pains in the iliac and hypogastric regions. These pains were constant but aggravated in paroxysms. They were evidently uterine, and no doubt the result of the ergot. These pains continued with scarcely an interval of ease, and finally became so severe and exhausting that I was obliged not only to discontinue the ergot, but to resort to hypodermic injections of morphia to relieve the terrible suffering. Even after the discontinuance of the ergot, the pains continued to recur daily between twelve o'clock M. and one o'clock P. M., generally requiring a dose or two of morphia to procure a night of rest.

In the meantime the cervix uteri gradually softened down and the os uteri became patulous, so as to admit the first phalanx of my finger, when I could reach the lower portion of the tumor. The pains still continued to recur daily. The os uteri became more and more soft and dilated, until it reached the size of a dollar, the lower portion of the tumor apparently becoming somewhat detached and gangrenous, filling up the os, and emitting a terribly offensive odor. I attempted with a strong polypus forceps to remove the offensive presenting mass, but could only tear away a part of the putrid portion, while as far as I could reach with my finger, I could feel the tumor firmly imbedded, apparently in the posterior and lateral walls of the uterus.

The constant suffering of my patient from the recurring pains, loss of sleep, etc., greatly exhausted her. Besides, her pulse became frequent and irritable, and her skin was almost constantly bathed in a profuse perspiration, while toward morning she sweated so profusely as to drench her clothing and the bed clothes. The discharge from the gangrenous mass became more and more offensive and profuse, and it became evident that my patient would die from septicæmia and exhaustion if the efforts of the uterus to rid itself of the offending tumor were not aided by the judicious application of art. Under these circumstances, I telegraphed to Prof. Thomas, to visit the patient and adopt such farther measures as he might deem necessary and expedient.

March 18, 4 o'clock, P. M., Prof. Thomas visited the patient with me; and in view of her weakened condition, the size of the tumor, its extensive attachments, and the great danger to the patient from any farther delay, he advised the immediate removal of the tumor, if possible, by enucleation.

Accordingly Mrs. A., was placed fully under the influence of ether, and removed to a table in a strong light. Sims' speculum was introduced, when the tumor could be seen filling up the partially dilated os. Dr. Thomas seized it with strong forceps, but it was so putrid as to tear on making traction. After removing as much as possible in this way, the doctor succeeded in passing the loop of an écraseur around a part of the remaining undecayed portion of the tumor and removed another large piece, the wire of

the écraseur breaking during the process. Having thus cleared the os and cervix of a considerable portion of the tumor, he next, partly by the use of an enucleator, and partly by a process of clawing, succeeded in entirely removing the mass, the whole process occupying upwards of an hour.

Mrs. A., was then carried to bed after the uterus had been freely washed out with carbolized water, and the effects of the ether allowed to pass off. She vomited several times, pulse frequent and feeble. Brandy and water were given *ad libitum* and a hypodermic injection of morphia gr. ss. was administered.

March 19, A. M.—Has passed a sleepless night notwithstanding the free use of brandy and morphia. Pulse, ninety-six : temperature, ninety-nine. Loathes food; perspires profusely; feels terribly sore.

P. M.—Pulse ninety-six; temperature ninety-nine and a half. Treatment—Quinine gr. iij ter in die: beef-tea and milk; morphia hypodermically and by mouth in sufficient doses to procure rest. Three grains have been taken during the day.

March 20, A. M.—Pulse ninety; temperature one hundred; discharge slight and not so offensive as before operation; continued treatment. The uterus is washed out twice a day with carbolized water, by means of elastic catheter introduced quite up to fundus.

P. M.—Pulse, eighty-five; temperature, ninety-nine and a half; the discharge becoming more free and offensive, but not so much so as before operation. Rests tolerably; still sweats profusely in the morning.

Without giving a detailed statement of the farther progress of the case, I will simply state that from this time Mrs. A., progressed favorably. Her profuse sweats gradually ceased; she soon began to crave food; the uterus soon subsided so as scarcely to be felt above the pubes. A few shreds of putrid matter were washed away by the injections, but the discharge soon ceased entirely, and in a short time the patient was sitting up, still feeble but apparently well, in much better health, at all events, than for several years past. The tumor, as nearly as could be estimated from the pieces, was about as large as a small cocoanut.—*Archives Clinical Surgery.*

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"Opium Antidotes," Exposed.

In the month of August last, Dr. George F. French, of Portland, Maine, was applied to by an opium-eater who asked his advice about a preparation advertised as a sure cure for the opium habit. Naturally being suspicious of such an article, he sent to the manufacturer, Mrs. J. A. Drollinger, of La Porte, Indiana, for

a sample bottle. This was furnished, but, as we understand, the proprietress declined to give any information as to its composition, saying, however, that it "is harmless when taken as directed," and "does not contain opium in any form." Failing to be satisfied with this assertion, the doctor applied such chemical tests as he conveniently could and got the reactions of morphia. But to make assurance doubly sure, and to supplement and confirm the chemical test by a physiological one, he secretly administered a small dose of the "antidote" to a person who had a peculiar idiosyncrasy with reference to opium. The speedy result was as has been anticipated, a manifestation of the symptoms which in this individual had always followed the exhibition of opium, namely, suffusion of the eyes, loss of voice, pain in the head, and insomnia. Dr. French then reported these facts to the Cumberland County Medical Society, which, at his suggestion, at once appointed a committee to further investigate the matter, and, and voted to bear the expense of whatever analyses might be necessary.

At the regular meeting of the society in September the committee presented the following

REPORT.

The committee to whom was assigned the duty of investigating the so-called "opium antidote" prepared by Mrs. J. A. Drollinger, of La Porte, Indiana, beg leave to report that a sample bottle of the article, which was obtained directly from the manufacturer, was sent to Dr. Edward R. Squibb, of Brooklyn, N. Y., for quantitative analysis. His onerous engagements rendered it impossible for him to conduct the investigation in person, but he sent the specimen to Messrs. Walz and Stillwell, chemists, New York, a firm which he thoroughly confided in and endorses. So deeply interested did he become in the project that he insisted upon bearing the expense of the analysis, in spite of the committee's expressed unwillingness to have him assume such a tax.

Walz and Stillwell report that "this sample is glycerine colored with analine red, and containing in solution crystalized sulphate of morphia 1.383 per cent. by weight,"—about seven grains to the ounce.

While this investigation was progressing, the committee found another alleged "opium antidote," prepared by "Dr. S. B. Collins, the Great Narcologist of the Age," likewise of La Porte, Indiana. A specimen of this was submitted to Dr. Henry Carmichael, Professor of Chemistry in Bowdoin College and Assayer of the State of Maine, who arrived at the following conclusions:—

- "(1.) The opium antidote contains morphine.
- "(2.) The morphine is combined with sulphuric acid.
- "(3.) The sulphate of morphine amounts to 3.2 per cent., or fourteen grains to the ounce."

Dr. Walz says that he made an analysis of Collin's "Antidote" in 1871, and found that it contained morphia, though he did not ascertain the quantity.

In conclusion, your committee respectfully suggest that the society take some action which will result in the wide dissemination of the information which has been acquired concerning these dangerous preparations.

FREDERICK HENRY GERRISH,	} Committee.
GEORGE F. FRENCH,	
THOMAS A. FOSTER.	

The society instructed the committee to present their report to some prominent medical journal, and if it seemed to them advisable, to give the public warning of the danger to which it is exposed through the newspapers of the State. A vote of thanks was passed to Dr. Squibb for his generous assistance.

The importance of this exposure is too obvious to require any extensive comment on our part. Physicians now have something better than general reasons to offer their patients when warning them to shun such nostrums. The profession will not be insensible to the valuable services which the Cumberland County Medical Society has rendered it and the community, and it is to be hoped that other similar bodies will be encouraged to display equal enterprise and spirit. There is a great opportunity for our brethren in the region of La Porte to distinguish themselves as guardians of the health of the people, and we trust that they will not be slow to follow up the track so well opened by their fellows in Maine.—*Boston Medical and Surgical Journal*.

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A Case of Phthisis, with a Vomica communicating with a gaseous Tumor on the Anterior Aspect of the Chest, Etc.

By J. A. LIPPINCOTT, M. D.

R. C. D., aet. 57, a native of Pennsylvania, and a lumberman by occupation, came under my care May 22, 1876, when the following note in reference to the history of the case was made. The patient, who comes of a healthy family, always enjoyed the best of health until six years ago, when he went through an attack of typhoid fever, which left him with a cough, from which he has never recovered. His illness, however, has not prevented him from working at times in warm weather. Last fall the cough became more severe, and the other symptoms—emaciation, debility, etc.—increased so markedly that he was compelled to take to his

bed, where he has remained up to the present time. In August, 1875, the right shoulder began to be painful, stiff, and swollen. The elbow, wrist, and finger-joints were then successively affected. Last February a swelling appeared at the upper part of the right chest, which has been the source of a good deal of pain. This swelling has been steadily enlarging.

I found the patient quite prostrate. He had coated tongue, fetid breath, and anorexia. He was much emaciated, and the capillary circulation was quite sluggish, as was evidenced by the cyanotic hue of the whole surface. He had a troublesome cough, accompanied by abundant, greenish, sometimes blood-stained, muco-purulent expectoration. The heart-sounds were feeble, but otherwise normal. There were no febrile symptoms, and the urine, with the exception of an excess of urates, contained nothing abnormal. The right shoulder-joint was stiff, and the slightest movement of it caused much pain. The deltoid muscle was flattened so much as to suggest a suspicion of subluxation, but examination showed that the head of the humerus was in its socket, and that the flattening of the muscle was due to atrophy from disuse. A marked degree of false ankylosis was found. The elbow was stiff but movable. The wrist and finger joints—indeed, the whole hand—were very much swollen, and motion was possible in them only to a slight extent.

On inspecting the chest, a uniform swelling was seen on the right side, circular in outline, about five and one-half inches in diameter, projecting about two inches at its centre, and extending from the lower border of the clavicle downwards, and from the right margin of the sternum outwards. It was more decidedly bluish in color than the surrounding parts, tense though elastic to the touch, and tympanitic on percussion. Satisfactory physical exploration of the chest in the region covered by the tumor was impossible, on account of the tenderness of the parts and the debilitated condition of the patient; and for the same reason the chest immediately above the tumor could not be thoroughly examined; but the loud gurgling, cavernous breathing, and tympany elicited over an extended area on very light percussion, demonstrated the existence of a cavity of considerable size and superficial in location. Some impaired percussion-resonance, with harsh respiration, prolonged expiration, and a few moist râles, indicated that the upper part of the left lung was also invaded.

Quinine, cream punch, porter, nourishing diet, and a mixture containing dilute muriatic acid and pepsin, were ordered, with an occasional opiate to relieve excessive pain and coughing; and a week later, as the man's condition was considerably improved and as the pain in the tumor seemed to be undiminished, I applied the aspirator and removed the contents, which consisted of inodorous air. After getting rid of the "inflation" and coming down to a "hard" basis, it was seen that the pectoral muscles were atro-

phied—presumably from the pressure exerted by the contents of the tumor—to such an extent that there now seemed no covering over the ribs other than a cutaneous one. The patient expressed himself as much relieved, and it was possible to make a more careful examination of the chest, which resulted in the conclusion that the vomica extended at least from just below the clavicle on the upper margin of the third rib. After the operation light pressure was applied, but this did not prevent a small degree of extravasation of air into the subcutaneous areolar tissue; this, however, was soon absorbed. Two days after the tapping, slight tumefaction reappeared during a violent fit of coughing, and it has remained since that time, but the swelling has never attained to its original dimensions. At times the communicating fistula seems comparatively pervious, and then the patient can, by pressure, return the contents of the tumor into the pulmonary vomica. I have been able to do this by pressing with the side of my head, and in this manner I have found it possible, by hearing the gurgling noise of the returning air, to fix—approximately at least—the location of the fistula, which is probably at the upper edge of the second rib, about one inch and a half from the margin of the sternum.

The subsequent history of the case is briefly as follows. When the patient had developed sufficient strength and courage, manipulation and friction of the ankylosed joints were instituted and continued, with the result of dissipating the swelling in the wrist and hand and restoring a considerable and most useful degree of motion in all the joints affected. The inflammatory action invaded the left wrist, but subsided quickly after, and possibly on account of, the exhibition of salicylic acid in small quantities dissolved in Huxham's tincture. About the middle of June the patient was able to go out, and also to retain and digest cod-liver oil, and from that time the cough and expectoration have appreciably diminished, and the patient has gained in strength and flesh.

Remarks.—The chief point of interest in this case is of course the tumor. Almost all writers speak of the frequency with which pleural adhesions are found when the destruction of lung-tissue is at all extensive, these adhesions being the means by which ulcerations into the pleural cavity, together with the consequent pneumopyothorax, are prevented; but there are comparatively few cases on record in which ulceration beginning on the lungs has extended through the thoracic walls; and no author to whose writings I have access alludes to the possibility of such ulceration resulting in the formation of a circumscribed swelling containing air. Dr. James H. Hutchinson, one of the physicians to the Pennsylvania Hospital, in an article on "The Local Treatment of Pulmonary Cavities by Injection through the Chest-Walls" (*Philadelphia Medical Times* of May 30, 1874), refers to a case—alluded

to by "Discipulus," in a series of papers published in Nos. 60, 171 and 180 of the *British Medical Times*—in which a cure is said to have followed the spontaneous evacuation of the contents of a vonica through the walls of the chest. In the same article Dr. Hutchinson quotes a case, reported by M. Bricheteau, in which, as a consequence of the actual cautery to the chest, a pulmonary cavity was opened and emptied of its contents.* In the *New York Medical Journal* for January, 1876, appears a brief account of a case of a perforation of the chest-wall in connection with a phthisical cavity. The point of perforation was beneath the clavicle, about two inches from the sternum, and from it, on forcible expiration, air and fluid issued. Before the February number of the *Journal* came out, the patient had died, and at the autopsy a cavity the size of a hen's egg was found, which opened between the first and second ribs. The pleura was adherent around the perforation, but in no other place. Dr. Morris Longstreth has called my attention to a case of "Lungenabscess mit allgemeinem Hautemphysem," reported by Dr. H. Lenator in *Virchow's Archiv* for 1872, vol. liv. p. 278 :

During the siege of Metz, a Hessian soldier was admitted into hospital for dysentery on the 8th of September. On the 10th, some precussion-dulness was noticed below the inferior angle of the left scapula. The lung-changes went on to softening, which, however, was not detected during life. On the morning of the 17th both sides of the face and neck, the greater part of the trunk in front and behind, and the left arm, were found to be emphysematous. By the 19th, the date of the patient's death, the emphysema had extended over the right arm and down to the thighs. At the necropsy an abscess, the size of a fist, and surrounded by very firm adhesions, was found at the posterior portion of the lower lobe of the left lung, which communicated with the subcutaneous tissue by at least one small opening situated in the ninth or tenth costal interspace, about two inches from the spinal column.

In this case the ulcerative action, which was acute, rapidly made its way through the deep structures to the subcutaneous space occupied by the loose areolar tissue, whereas, in the others alluded to, the inflammatory process was in all probability sufficiently chronic to permit of the gluing together of the superficial tissues, thus effectually preventing the occurrence of corporeal emphysema. The peculiarity of the case now for the first time reported lies in the fact that the destructive process was so chronic as to allow of the gradual distention, with air, of tissues at least as deep as the fascia lining the greater pectoral muscle.

On first looking at the tumor, and seeing also the swollen joints, the thought flashed across my mind that it was a metastatic abscess. This idea rapidly gave way to the suspicion of its being a collec-

*Valleix, *Guide du Medecin Praticien*, p. 800.

tion of pus communicating with the lung-cavity. A single tap, however, eliciting a distinctly tympanitic sound, revealing the true character of the swelling. That the collection was beneath the deep structures, and not in the subcutaneous areolar tissue, was established by the absence of crepitation, and by the fact that the tumor was circumscribed, being limited at the sternal margin by the origin of the pectoralis major. In fact, before the aspirator was used the pain was most intense along the margin of the sternum, and was doubtless due to the forcible stretching of tendinous fibers of the muscle at its place of origin. The fact that pus did not escape from the vomica into the swelling is to be accounted for by the probable hypothesis that the opening was small and slit-like; and further examination showed very conclusively that it was not at the lower part, but well up on the anterior wall of the cavity, and that there was a free outlet for the secretions through the bronchial tubes. In view of the following facts,—that the tumor was directly over the vomica (which was extensive); that it was reproduced, after tapping, by violent coughing; that it could be made to disappear by pressure; and, finally, that on applying the ear to the chest in a certain region, and simultaneously making pressure, the peculiar sound of the air passing into the vomica could be distinctly heard,—it was clear that the pulmonary cavity communicated with the extra-thoracic collection of air through an opening in an intercostal space, and constituted, indeed, its *fons et origo*. I may add that Professor Da Costa, who saw the case, lent the weight of his opinion in favor of this conclusion.

As to the local treatment, aspiration was of course indicated as a means of securing temporary relief; but was no radical treatment to be attempted? Should I have injected tincture of iodine, or some other irritating fluid, with a view to setting up adhesive inflammation? I thought not, because, in the first place some of the fluid might find its way into the vomica and interfere with the favorable progress of the case; and in the second, considering the general debility and the inactivity of the circulation, I feared that suppurative inflammation might be induced which might lead to a communication between the vomica and the external air through the thoracic wall, an event for which I did not feel prepared. There remained what, to my mind, was the safest plan of treatment, namely, by elastic pressure; but the patient preferred to delay the application of the necessary apparatus, and it was not made use of systematically. The tumor, however, has not given him much trouble; if it does, I shall resort to pressure (preceeded, if necessary, by aspiration), by means of raw cotton or soft sponge confined with adhesive strips.

In regard to the administration of salicylic acid, although I have not heard of its being given in cases of pyæmic arthritis, I claim no originality on that score, since the drug has been pre-

scribed of late in so many and so diverse affections, for reasons philosophical an unphilosophical, that it would be strange indeed if it had not long ago been used as a remedy in this form if joint-inflammation.

* * * * *

Since the above was written, the swelling has opened spontaneously. The patient, whom I had not seen for about ten days, sent for me yesterday, and, when I arrived, informed me that for several days he had had a good deal of pain in the tumor, and that "it was hot enough to cook an egg."—a new feature. He also stated that about two hours before my arrival an opening had formed, from which there came a medium-sized cupful of yellowish matter. This had, unfortunately, been thrown out, so that I had not an opportunity to examine it; but his wife said that it was stringy and tenacious. I expressed a small quantity of pus mingled with bubbles of air, and found the former not markedly unhealthy. The opening was over the sternum, near its right edge, on a line with the second intercostal space, some two and a half inches from the point where the aspirating needle had been inserted, which was at the most dependent portion of the swelling. The man was much relieved by the escape of the contents of the tumor, but said he felt faint and slightly nauseated.

What had taken place? Clearly, the intercostal opening, which, for some inexplicable reason, had previously remained small in size, with comparative suddenness—probably during the week—attained sufficient calibre to allow of the passage of the secretions of the vomica. These have produced suppurative inflammation in the hitherto quiescent tumor, which process has resulted in the usual way. We have, therefore, a vomica in the lung, communicating with the external air through what may now be regarded as an abscess in the thoracic wall. I shall probably enlarge the external opening and syringe out the abscess, and thus, indirectly, the vomica, with carbolic or salicylic solutions, and I shall expect to find, in the sputa expectorated, considerable quantities of the material injected.

The further progress of this interesting case I shall at some future time beg the privilege of laying before the readers of the *Times*.—*Phil. Med. Times*.

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Correspondence.

JAMESSTOWN, N. Y.

EDITOR BUFFALO MEDICAL AND SURGICAL JOURNAL: The following, if of interest, is at your service:

A case has just presented itself at our office which is so unique

that the profession should have the benefit of its record. If such a case has ever been recorded it has escaped our notice or memory.

B. a girl about eight years of age, well developed, health good, has a firm elastic membrane stretched from the uvula to the base of the tongue, firmly and evenly attached throughout the whole circuit. The velum projects about one-fourth the diameter from above. To the left side opposite the point of the velum is an opening about the size of a large pea. The mother says that she could never swallow fluids but in small quantities and slowly; that solid food could be taken only in very small quantities, and after chewing for a long time. Her voice was very defective and nasal. She was completely relieved by the free use of a curved pointed bistoury. Hemorrhage slight.

Yours truly,

G. W. WHITNEY, M. D.

W. P. BEMUS, M. D.

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Editorial.

Malpractice and Medical Testimony.

A recent suit for malpractice in this city has attracted so much attention in medical circles, that we give in our miscellaneous department a synopsis of the medical testimony, condensed from the notes of the court stenographer.

The decision of the case turned upon the question of whether there had been a dislocation of the hip as claimed by the plaintiff. The defense claimed that the injury was not a dislocation, but a fracture, and that it was of such character as to escape detection. The defendant's counsel asked that four experts be appointed by the court to examine the plaintiff and give testimony as to his present condition. This request was acceded to and Drs. E. M. Moore, of Rochester, James P. White, Thomas F. Rochester, and Julius F. Miner, of Buffalo, appointed. The result of their examination is given in the testimony published elsewhere. Dr. Moore was prevented from testifying by a severe family affliction, but we understand he fully agreed with his fellow appointees.

We are very sorry to say that the chief witness on the part of the plaintiff has attempted to make himself and the public believe that the testimony of the ex-

perts appointed by the court was chiefly given with a view of destroying his reputation, and taking away from him the credit of having reduced a dislocation of the head of the femur of nine months' duration. As his own testimony shows that he did not reduce the dislocation, we do not see how he can consistently make this plea. It is certainly a very serious charge for him to say that four men of large experience and extensive reputation would deliberately perjure themselves to detract from him a certain amount of merit, which after all, by his own showing, does not belong to him. For Dr. Gay personally, we have the kindest feelings, and our readers have formed a certain acquaintance with him through our columns. We are, therefore, very sorry that he should take this position. Medical men frequently differ as to matters of diagnosis and treatment, but they can and do have these differences without any personal feeling in the matter. If Dr. Gay honestly thinks there was, on the twenty-sixth of May last, a dislocation, we respect his opinion, but we also think that Drs. White, Miner and Rochester, as well as the other medical witnesses in the case on behalf of the defendant, are equally honest in saying that the injury with which Bergman is now suffering, and has been probably since the receipt of the injury in August, 1875, is a fracture of the neck of the femur.

Dr. Gay now candidly says that he did not reduce the dislocation, but that the head of the femur is in the ischiatic notch. He has, as will be seen by reference to the Proceedings of the Buffalo Medical Association, promised a full report of the case in the future, and as a brief reference to it as a successful reduction is found in the Proceedings of the American Medical Association which might lead to erroneous conclusions, we hope he will do so. One lesson which all can learn from it, is, the inadvisability of reporting cases until the diagnosis and results of treatment are fully established. We suspect, if this rule were adhered to, the statistics of many surgical operations, as well as of the termination of certain cases of disease, would be materially changed.

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Books Reviewed.

Micro-Photographs in Histology, Normal and Pathological. By Carl Seiler, M. D., in conjunction with J. Gibbons Hunt, M. D. and Joseph G. Richardson, M. D. Philadelphia: Porter & Coates. London: Macmillan & Co.

We have received the first four numbers of this new publication, each containing four photographs, with brief descriptive letter press. The plates are—I. Section of skin (X 80). II. Epithelioma of Lower Lip (X 80). III. Pavement Epithelium, from a Triton (X 80). IV. Endothelium, from the diaphragm of a Guinea Pig (X 80). V. Elastic Connective Tissue (X 120). VI. Scirrhus of

Mammary Gland (X 180). Non-elastic Connective Tissue from Omentum of a Cat (X 80). VIII. Connective Tissue Corpuscles, from Cornea of a Frog (X 120). IX. Longitudinal Section of Femur—Human Fœtus (X 120). X. Enchondroma (X 120). XI. Hyaline Cartilage (X 180). XII. Transverse Section of Dry Bone (X 80). XIII. Hepatic Cells, from Liver of a Fly (X 80). XIV. Leukæmia of the Liver (X 220). XV. Blood Corpuscles of Man and Ox (X 650). XVI. Fat Cells, from Mesentery of a Cat (X 200).

The real value of these photographic illustrations of histology is much lessened by the excessive claims made for them by Dr. Seiler. He says in his prospectus "This publication is intended to replace the microscope, as far as possible." That "As these pictures are obtained directly from microscopic objects by means of photography" * * * "they have the great advantage of being faithful copies of the pictures formed by the lens, and there is nothing produced that is not actually visible in the instrument, thus avoiding the diagrammatic character and subjective coloring which are so frequently found in drawings made by means of the camera lucida. In fact, the illustrations used in the lecture-room and found in books are idealized so much as rarely to give an exact impression of the specimen as it really exists."

Now it so happens, that in order to differentiate various tissues in a specimen, it is often necessary to stain it with some color, generally carmine or some shade of red or blue, or both methods may be employed. In these cases the brilliantly colored picture seen in the microscope is far more adequately represented by a well executed colored drawing than by the simple black and white of a photograph, no matter how excellent the latter may be. Nor is this all, as the actinic power of blue light is much greater than that of red, it follows that in the photographic (positive) plate the blue portion of a specimen will appear light while those stained with carmine or aniline red will appear dark in comparison, even though the actual tint of the carmine be lighter than that of the blue. These objections hold good against all photographs of stained or colored preparations, and yet there can be no doubt of the value of *good* photographs of pathological preparations, when they are used with a distinct allowance for the imperfections inherent in this mode of representation. We fear that the student who places implicit faith in Dr. Seiler's glowing prospectus is doomed to far greater disappointment upon comparing these photographs with good preparations, under a good microscope, than he would have suffered had he depended upon the colored drawings of such men as Dr. Beale. And this, not only because of the inherent impossibility of giving in plain black and white a vivid representation of a colored object, but because these plates do not, as a general thing, represent the best work of micro-photography. In support of this statement, it is only necessary to call attention to a few of the plates taken almost at random. Plate I, for instance, is labeled "Section of Skin, traversing through the hair-bulbs," but so ill-defined and blotchy is the general appearance that we almost doubt that any one could guess what it was intended to represent. Plate IV. Endothelium, from diaphragm of Guinea Pig, is even worse, and the same is true of Plate V.

Plate XV is a photograph of a slide prepared to show the blood corpuscles of a man and ox side by side upon a micrometer scale, which is photographed with them. This gives a ready means of measuring the positive and comparative diameter of the corpuscles. It is easily seen, even under this comparatively low power for this kind of work (650 diameters,) that the human corpuscles are sensibly larger than those of the ox.

To sum up them, while some of these plates, Nos. III, VII, XII and XV for instances, are very fair, others are very bad, and no great praise can honestly be awarded to any of them. Yet in spite of all its faults, the publication is a valuable one, and we hope it will meet with a liberal support, and that, as Dr. Seiler gains greater skill as a photographer (and uses, perhaps, better lenses,) the quality of the illustrations will steadily improve.

Chirurgie Antiseptique Principes Modes D'applications et Resultants du Pansement De Lister. PAR LE DR. JUST LUCAS-CHAMPIONNIERE. Paris: Baillière et Fils: 1876.

American physicians are often so hurried by the general habit of "rushing things" which is so characteristic that but few of them have given much attention to Lister's method of so called anti-septic treatment. Now that Lister has been to the pains of coming across the water to explain his method at the International Congress, it is very probable that physicians will take a little more interest in the subject. The work before us is a French exposition of the mode of Lister, and is written by one who is an enthusiast on the subject. He details quite minutely the germ theory, upon which the treatment is based, and explains all the processes and variations of the anti-septic dressing of wounds, to obtain a knowledge of which he spent some time in Edinburgh under the tuition of Lister. He gives an account of some of the most notable results obtained by this method, and urges its trial and adoption by his countrymen. The work contains all the information that could be desired, and it is presented in a style which though eminently terse is nevertheless pleasing.

A Manual of Percussion and Auscultation. By AUSTIN FLINT, M. D. Philadelphia: Henry C. Lea, 1876. Buffalo: T. Butler & Son.

In this little work Dr Flint has given to the profession the substance of the lessons which he has given to his private classes for many years upon physical diagnosis. The reputation of the author, as a master of the subject, will make the work at once popular with students and physicians. The subject is treated in a clear, familiar manner, and is at the same time concise in all its details, no one seeking for information on these topics can leave this work, after diligent study, without having gained a large fund of knowledge.

Inhalation in the Treatment of Disease: Its Therapeutics and Practice. A treatise on the inhalation of gases, vapors, fumes, compressed and rarified air, nebulized fluids, and powders. By J. SOLIS COHEN, M. D., etc. Second Revised Edition. Philadelphia: Lindsay and Blackiston, 1876. Buffalo: Theo. Butler & Son.

Dr. Cohen has divided this work into four parts or sections. The first treats of the inhalation of airs, gases, vapors and fumes; the second considers the use of nebulized vapors or sprays; the third of the inhalation of powders; the fourth considers medicated atmospheres. A large share of the stock in trade of quacks and charlatans has been the use of inhalations of various kinds, and for this reason the profession have come to look upon their employment with disfavor, and have been prejudiced against giving them even a fair amount of study and investigation. Dr. Cohen has brought to the task which he has undertaken in the preparation of this work, an excellent knowledge of the diseases generally treated by inhalations and the results obtained in those affections by other forms of treatment. He has, by careful research, drawn from the published experience of all writers of importance upon this topic, and given to the profession as the result a work which will be of great value to them in the treatment of certain of the diseases of the air passages. The work is amply illustrated, and the explanations concerning the various modes of employing inhalations are sufficiently explicit for all. Dr. Cohen has given a work to the profession which will be of much value.

A Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M. D., F. R. C. P. Philadelphia: Henry C. Lea, 1876. Buffalo: Theo. Butler & Son.

As Dr. Playfair's work is written mostly for Englishmen, and from an English point of view, there are in it some statements which will not wholly coincide with the views of the majority of American readers. It is not, however, to be considered as a treatise, and is not, therefore, to be viewed as such. It is written in an easy, familiar style, such as will make it agreeable as a text-book to students, and as a convenient work of reference for physicians. The numerous excellent wood-cuts will add much to the simplicity of the text, and will impress the teachings of the author upon the reader. The work is divided into five sections, which consider in turn: The anatomy and physiology of the organs concerned in parturition, pregnancy, labor, obstetric operations, and the puerperal state. The author, unlike some English writers, announces his preference for the long forceps which he very properly states can be used in all cases, and with as much ease and gentleness as the shorter ones. He evidently labors under a misapprehension when he says, that American and Continental forceps are larger

and more cumbrous than the English. This fact is largely true in reference to the German and other Continental instruments, the handles of which are heavy and unwieldy, but the American instrument in greatest favor is light and graceful, and possessed of an advantage not found in many European instruments, the second or pelvic curve. The author includes under puerperal septicæmia, septicæmia, pyæmia and puerperal fever. He seems to think the view which holds that puerperal fever is something separate and distinct is a mistaken one, that it is identical with what surgeons have known as septicæmia and pyæmia. While we acknowledge some force in the arguments for this side of the question we are still inclined to look upon puerperal fever as a disease special and incident to the puerperal state. This is as we understand it the position taken by Prof. Barker in his excellent work, with which our readers are many of them familiar. The general style of the work, the print, etc., are of a first class order.

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Books and Pamphlets Received.

Cyclopædia of the Practice of Medicine, Edited by Dr. H. Von Zieinssen. Vol. VI. Diseases of the Circulatory Organs; together with chapters on Whooping Cough, Diseases of the Lips and Cavity of the Mouth, and diseases of the Soft Palate. New York: Wm. Wood & Co., 1876.

A Treatise on the Theory and Practice of Medicine. By John Syer Bristow, M. D., Lond., F. R. C. P. Edited with Notes by James H. Hutchinson, M. D. Philadelphia: Henry C. Lea, 1876. Buffalo: T. Butler & Son.

A Practical Treatise on the Diseases, Injuries and Malformations of the Urinary Bladder, the Prostrate Gland and the Urethra. By Samuel D. Gross, M. D., LL. D., D. C. L. Oxon. Third edition, revised and edited by Samuel W. Gross, A. M., M. D. Philadelphia: Henry C. Lea, 1876. Buffalo: T. Butler & Son.

Epitome of Skin Diseases, with Formulæ, for Students and Practitioners. By Tilbury Fox, M. D., F. R. C. P., and T. C. Fox, B. A. (Cantab.), M. R. C. S. Philadelphia: Henry C. Lea, 1876. Buffalo: T. Butler & Son.

A Century of American Medicine, 1776-1876. By Edward H. Clarke, M. D., Henry J. Bigelow, M. D., Samuel D. Gross, M. D., LL. D., etc., T. Gaillard Thomas, M. D., and J. S. Billings, M. D. Philadelphia: Henry C. Lea, 1876. Buffalo: T. Butler & Son.

A Contribution to the Treatment of Uterine Versions and Flexions. By Ephriam Cutter, A. M., M. D. Second Edition. Boston: James Campbell, 1876.

Compendium of Histology. Twenty-Four Lectures. By Heinrich Frey. Translated from the German by Geo. R. Cutter, M. D. New York: G. P. Putnam's Sons, 1876. Buffalo: Peter Paul & Bro.

Studies, Chiefly Clinical, in the Non-Emetic use of Ipecuanha: With a Contribution to the Therapeutics of Cholera. By Alfred A. Woodhull, M. D. Philadelphia: J. B. Lippincott & Co., 1876. Buffalo: Peter Paul & Bro.

B U F F A L O

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Original Communications.

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ART. I.—*The Rational Treatment of Epilepsy. A Brief Review of the Phenomena and Pathology of that Disease, with observations relative to the value of the Ophthalmoscope as a means of determining the varying states of the Intra-Cranial Circulation.*
By REUBEN A. VANCE, M. D., President of the Ohio Valley Medical Association. Gallipolis, Ohio, Nov. 1876.

It is a matter of common observation, that cases of Epilepsy are affected very differently by the same method of treatment; that the same drug administered in the same quantities to cases that apparently resemble each other in every particular, will at times set in a diametrically opposite manner. The bromide of potassium, for instance, will at once relieve certain cases, while in certain others it invariably increases the number and severity of the paroxysms.

As a general rule, it can be said that the cases of epilepsy benefited by the bromide will be those characterized by the diurnal occurrence of the fits, while those injured by it, will be the cases

in which the paroxysms are either exclusively nocturnal, or occur principally by night.

It is also a matter of experience that those cases in which the fits are controlled by the bromide, present something like the following history: For a variable period after commencing with this drug the paroxysms cease, but sooner or later, in the vast majority of cases, they return in an altered form and recur with increased frequency. However much the dose of the bromide is now increased, it will fail to control the paroxysms, and it will be necessary to stop its administration for several weeks. As soon as the system recovers its natural tone, the bromide can be recommenced, and another interval of freedom will ensue to be followed, in turn, by a similar series of convulsions.

I claim that the difference in the character of the convulsions, as well as the different effects of this remedy, are due to variations in the cerebral circulation; that in one class of cases—those occurring principally by day—there exists, as the efficient cause of the convulsive seizures, a congested condition of the brain; while in those which recur either generally or exclusively by night, there is present the opposite state, an anaemic condition of the cerebral organs. The physiological effect of the bromide of potassium is to diminish the amount of blood circulating through the brain. This fact explains why this drug relieves those cases in which the disease depends upon cerebral hyperæmia and aggravates those in which the efficient cause is an anæmic condition of the brain.

I also declare that the ophthalmoscope affords a ready means of determining the state of the cerebral circulation, thus indicating the treatment to be pursued in a given case. The vascularity of the optic disk and retina is indicative of the blood-supply of the brain. Hyperæmia in the one indicates hyperæmia in the other, and *vice versa*. Treatment is always to be directed to the correction of any abnormality in the intra-cranial circulation, and for this purpose remedies are to be used which experience and observation have demonstrated to possess the power of producing the desired change; for instance, bromide of potassium or oxide of zinc, when it is desirable to relieve a hyperæmic state, and belladonna or strychnia, when we wish to counteract an anæmic condition.

While these remedies, judiciously administered, always tend to relieve the patient, such relief is generally but temporary in character. This fact is explained as follows: In those widely opposite conditions, cerebral hyperæmia and anæmia, we have the efficient causes of these two classes of epileptiform symptoms, and in the physiological effects of remedies like the bromide of potassium and sulphate of strychnia, we have a rational explanation of the manner in which they can be relieved. Were these drugs so endowed as to cease their effects when they have restored the cerebral circulation to a normal standard, the problem of the cure of the vast majority of epileptics would be solved at once. Unfortunately, however, such is not the case; these remedies tend to produce but one effect, and that, if carried too far, will result in the production of a condition equally competent to cause epileptiform symptoms. For instance, the condition of cerebral hyperæmia causing convulsions may be so affected by medicines as to gradually pass away, and be succeeded by a normal state of the intra-cranial circulation. With the continued administration of the same remedy, the amount of blood will diminish more and more until an anæmic condition is induced. A similar result follows the administration of remedies calculated to increase the amount of blood in a brain where the epileptiform symptoms are due to cerebral anæmia. With the increased quantity of blood sent into that organ, a normal condition is produced; as the action of the drug continues, this is succeeded by hyperæmia. In other words, any remedy which has the power to affect the cerebral circulation, may, when pushed too far, result in the production of a condition competent to again excite convulsions.

If such diametrically opposite cerebral conditions can cause epileptiform symptoms, and if the methods of treatment which relieve them temporarily are liable from their own effects, to bring them on again, how are we to regulate our remedies so as to prevent these bad results? Have we any means of observing the changes in the brain circulation which will enable us to watch the effects of our medicines, and so avoid the production of these extreme conditions? I claim that we have, in the ophthalmoscope, an instrument which will enable us to accomplish the desired

object. I have reported a number of cases in which a successful result has been obtained by treatment directed in accordance with the indications afforded by ophthalmoscopic examinations. These examinations should be repeated as often as twice a week during the time the patient is under treatment. No case can be considered cured until an interval of one year has elapsed from the last convulsion, but the number of patients who have been radically cured by this course of procedure is now so large that the therapeutic measures by which they regained their health deserve to be ranked among the most valuable resources at the command of the physician.

For a more complete exposition of the principles advanced in the above, the reader is referred to the *New York Medical Journal*, February, 1871, and the *American Journal of Syphilography and Dermatology*, July, 1871.

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ART. II.—*Sarcoma of the Dura Mater. Report of a Case, with Post Mortem Examination.* By E. N. BRUSH, M. D.

In March, 1875, I was invited by my friend, Dr. O'Brien, of this city, to see Mr. S., who had sought his advice in reference to a tumor growing upon his head. I found at about the junction of the sagittal with the lambdoid suture a tumor about the size of an English walnut. Its growth, I was informed, had been slow and unattended by pain, it was quite movable under the scalp and pretty firm pressure did not cause any unpleasant feeling. I diagnosed a sebaceous tumor of the scalp and advised its removal. Not being able to leave his business at the time, Mr. S. preferred to postpone the operation until he could take a short vacation in the summer.

I saw nothing more of the patient until February 13th, 1876, when I was requested to assist in the removal of the tumor, which I was told, had rapidly increased in size, and was, on that account, somewhat inconvenient. I was considerably surprised at the size and shape which the tumor had now attained. It had extended

further back on the head, so that in lying on his back the patient said the tumor was uncomfortably pressed upon. The growth now measured about four and one-half inches in one diameter by from five to six in the other, and projected from the cranium about three inches in the thickest portion. It was but slightly movable and was irregularly nodulated. Its exterior had a shining vascular appearance in some portions which attracted our attention. The immobility we accounted for by the tension produced by the large size of the growth, and to this we also attributed the shining appearance of the scalp. The tumor was not painful on pressure and did not pulsate. It felt soft and elastic. Ether was administered and Dr. O'Brien began the operation by making an incision from before, backwards over the most prominent part of the tumor. We were at once struck by the unusual thickness and great vascularity of the scalp. The scalp seemed dense and its vessels were very much enlarged, an incision at least half an inch deep being necessary before the tumor was reached.

The growth presented itself at the bottom of the cut, having what was, apparently, a containing sac or cyst-wall. I now passed my finger into the wound and began the process of enucleating the tumor. It was easily separated from the scalp, but I was somewhat surprised, on approaching the cranium to find that the membrane covering the tumor was not turned inward under the sides of the growth, but that on the contrary it spread out in all directions upon the skull, making it impossible to raise the tumor from its attachments. Thinking that I might have possibly mistaken a layer of fascia for the investing membrane of tumor, I ruptured this membrane with my finger-nail and passed my finger immediately down upon the bone and thence under the tumor. I immediately recognized the fact that I had passed into the tumor, that it was not sebaceous in character and that beyond the membrane I had just ruptured, it had no retaining sac. Using my finger for a director I enlarged the incision that I could more easily examine the character of the tumor and the extent of its attachments. To do this I passed my finger through the opening which I had made in its investing membrane, down to the base of the tumor. In doing this I came in contact with roughened and

eroded bone and in sweeping my finger under the growth to separate it from the skull I was startled by passing into a hole in the cranium. From the fact that the substance of the tumor dipped into this hole it was evident that the growth communicated to some extent with the interior of the cranium. It was now deemed best to discontinue the operation, but before closing the incision, Dr. J. F. Miner was sent for. Being in the vicinity, he arrived shortly and on making a careful examination, expressed his opinion that the tumor arose originally within the cranium, that it had eroded its way through the bone, and its removal was of course impossible. The incision was drawn together by sutures, warm water dressings applied and the patient placed in bed.

On recovering from the ether his mind was clear and active, pulse one hundred, and he complained but little of pain. A portion of the incision healed by first intention, but the great separation of the external attachment of the tumor which I had made with my finger destroyed its vitality and in a few days it was evident that it was sloughing out. In a short time I was able to lift out a large portion of the most prominent part of the tumor, and after the removal of a few shreds by suppuration, a red protuberant mass, about the size of a walnut was noticed in the bottom of the cavity. The mass bled easily and pulsated regularly, showing that it arose from, or was connected with, the brain. Beyond keeping the wound clean and the patient free from pain, nothing was necessary. His mind was perfectly clear, he watched his case carefully and noted all the symptoms. The pulse never rose above one hundred and twenty and frequently was as low as eighty. No chill or febrile movement was at any time noticed. His condition continued good until the 8th of March, when he noticed a loss of power and sensation in the right side; this condition increased until it almost amounted to complete hemiplegia; at this time he complained of pain in the head, was disturbed and restless when asleep, but at no time delirious. The hemiplegia, which never became complete, improved to some extent after the fourth or fifth day. Bromide of Potassium in twenty grain doses secured freedom from headache, and, to some extent, quiet sleep. On the second day of the paralysis he found himself unable to evacuate his

bladder and the catheter had to be resorted to from that time until his death.

On the night of March 22d, I saw him, in the absence of Dr. O'Brien. He was breathing sterterously at the rate of twelve per minute, his pulse was rapid and feeble. He could only be aroused to respond to questions after considerable effort, but when aroused would recognize those about him and give intelligent replies; he would, however, at once sink again into a semi-comatose condition. Death occurred in the forenoon of March 23d.

The following notes of the autopsy are furnished by Dr. W. W. Miner, who was present, and subsequently made a microscopical examination of the tumor.

"AUTOPSY.—The tumor projected like a mound from the upper back part of the head, centering in the median line, half-way in the interparietal suture from frontal to occipital bones. Its base had a diameter of about seven inches; it projected about three inches above the skull; had in its center an open, suppurating cavity about two inches in diameter, with ragged edges, fungating, red, tumid, with base about two inches deep, grayish, sloughing. Weight of tumor estimated at one and one-half pounds. On section of the scalp, the tumor was found to raise up the pericranium from beneath. The scalp was thickened in front but not affected by malignant change, was separable from morbid growth on all sides.

"On separating the tumor from its marginal attachments by dissection and uplifting it from the base, it was encised on a level with the external surface of the skull; the central portion of its base being found continuous with a part inside the cranium, passing through an eroded perforation with very ragged edges of irregularly rounded outline and a diameter of from one and one-half to two inches. The eroding process has affected the border of the perforation for a circle of half an inch breadth about it. A space two and one-half inches in diameter on the external surface of the skull anterior to and something larger than the perforation, shows erosion about one fourth way through the thickness of the bone. Other portions of bone covered by base of tumor are very slightly roughened by inflammatory deposit.

* A circular section of the cranium was removed and is preserved in the Museum of the Medical College. Channels for meningeal vessels running towards the perforation are somewhat abnormally developed on the inner surface of this section. The dura mater was thickening, not adherent; pia injected. The portion of the tumor internal the skull was found situated in the dura mater and extended downwards in the falx cerebri an inch and a half; it would weigh about three ounces. Sections of different portions of the growth showed it to be of a whitish color, of a uniform and somewhat firm consistency, except in the neighborhood of the suppurating cavity and free from calcareous or bony deposits. Marks of depression existed upon the lobes of the cerebrum on either side the median line. They were of natural appearance and entirely separate from the growth in the meninges. On incision, however, a cavity of pus extending downwards was found in the central part of the left cerebral lobe which was doubtless due to pressure and was the immediate cause of death.

"The circle of erosion and disintegration is much less on the internal surface of the skull. The erosion, however, being more deeply cut than on the external. It would be difficult to determine from the edge of the perforation, bevelled on both sides, whether the malignant process commenced in the connective tissue on the internal surface of the skull, or external. The erosion has for some time been progressing upon both external and internal surfaces simultaneously. The activity of the malignant process has been mainly external and probably wholly in the soft tissue. There was no adhesion of the tumor to the disintegrated bone beneath it. Osseous erosion was occasioned very markedly on the external surface in the space anterior to the perforation by contact with diseased soft parts.

"Microscopical examinations of the tumor showed its tissue to be of whitish color and to yield abundant clear fluid in which very numerous round cells appeared, of which the tissue itself was mainly composed, intercellular material being scanty and hardly to be recognized. It was accordingly determined to be a sarcomatous tumor of the round-celled variety."

The interesting features of this case are the origin of the growth,

its size, and the absence of all brain symptoms until so short a time prior to death.

Similar cases are on record in several of the works upon surgery, and the anatomical characteristics of the growth are mentioned in works upon pathological anatomy. Gross, in his surgery, speaks of these tumors, and mentions two operations for their removal which have been reported, and Hamilton (Principles and Practice of Surgery, page 520), speaking of these growths under the term Fungus of the Dura Mater, says: "The prognosis is unfavorable, but the only remedy is the enlargement of the cranial aperture and a careful dissection of the tumor from the Dura Mater." It hardly seems to me that the attempt to remove a tumor of this character, with a full knowledge of its attachments, would be justifiable. Certainly, no operative measures would have been successful in the case under consideration. On page 581 of Holmes' Principles and Practice of Surgery, will be found illustrations of a case in some respects similar to this one. The tumor, however, arose externally and perforated the skull, and was not malignant in character. The only brain symptoms were occasional attacks of epilepsy.

The difficulty of exactly defining the character of this tumor prior to the operation, and the hope that a report of the case may place others on their guard in diagnosing tumors in this locality, is the object in reporting this case.

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Correspondence.

BERGMAN VS. "DR." VOLKER.

"SUIT FOR MALPRACTICE INVOLVING THE SURGERY OF THE
HIP-JOINT."

A R E P L Y.

Editor Buffalo Medical and Surgical Journal:

DEAR SIR.—The October number of the JOURNAL is received, in which is published the medical testimony in the "Suit for Mal-

practice involving the Surgery of the Hip-Joint, condensed from the notes of the Superior Court Stenographer," with editorial remarks.

Comparing my own testimony published in the Journal, with the Court Stenographer's report—a copy of which I have before me—I find several errors, but in the main, the report, what there is of it, is sufficiently correct to serve the purpose of its publication.

On page 92 the fractional figure $\frac{3}{4}$ is changed to $2\frac{3}{4}$. On the same page the word "Eczematous" occurs in place of Scales; the first two lines on page 93 is an interpolation, to the doctrine of which I do not subscribe. Errors occur also in the testimony of the other medical witnesses which I will not notice.

In two or three paragraphs on page 118 of your editorial, you make such a grave arraignment that your readers will expect to know what the undersigned has to say in his own behalf. You say, "it is certainly a very serious charge for him to say that four men of large experience &c.," "would deliberately perjure themselves to detract a certain amount of merit," &c. I suspect you must have drawn upon your imagination when you indicted that sentence. Perhaps some evil spirit suggested the thought to you. However I must plead innocent to the charge. I certainly cannot allow you the privilege, if it be such, of placing me in any relation with these gentlemen whereby I am made to offer any such affront as you charge. Allow me to rehearse the leading facts of the case under consideration.

On August 31st, 1875, Bergman was knocked down in the street by a passing vehicle. He was struck upon his right side. How he fell to the ground is not known. The blow was certainly not direct. He has large muscular development, and therefore much more liable to dislocation from an indirect blow than a lean man of the same age. He is helped up, puts his hand upon his left hip and complains of great pain. "Dr."? Volker was called upon to render professional services, but after making a few visits retired from the case on the ground that he could not give the patient any relief. On December 11th, 1875, he first came under the observation of Dr. J. F. Miner, and subsequently Dr. Hineman, a homœopathic physician, "commenced" as he testifies "to treat him first

in February, 1876." On May 18th, 1876, Dr. Loomis invited the writer to visit the patient along with him. Dr. Loomis had not yet seen Bergman, but it was represented to him that the sick man had swollen limbs. Anticipating a case of œdema of the lower extremities, or perhaps of Elephantiasis, Dr. Loomis requested me to accompany him that we might together be able to testify to the patient's condition in a suit—not the recent one—then in contemplation.

We found considerable, but not excessive œdema of the lower limbs, which were also covered with scaly sores. A thorough examination was instituted to determine whether there was any organic disease—as of the heart, liver or kidneys—which would give rise to the existing œdema. No such disease was discoverable. Our attention was then directed to the left leg of the patient, where were found all the symptoms which Sir Astley Cooper, Hamilton and Malgaigne describe as indicative of dislocation of the head of the femur upon the dorsum of the ilium; in other words we found the left leg shortened over two inches, the leg and thigh inverted and the toes lying over upon the dorsum of the opposite foot. The limb resisted all attempts at eversion. There was a bony prominence upon the dorsum of the ilium; so well marked were these symptoms we had no difficulty whatever in agreeing upon a diagnosis, and either of us would have been willing to go into court the next day and swear to the fact of existing dislocation.

Eight days later, Bergman was put under chloroform and examined by the following physicians; Drs. Burwell, Hauenstein, Hopkins, Diehl, Bartow and myself, six in all. All of these gentlemen were cognizant of the above mentioned symptoms. They were witnesses of the fact that the limb could not be enverted beyond the perpendicular without turning the patient's entire body forcibly over. I at first manipulated the limb to break up the adhesions; this achieved, I rotated the thigh inwards and turned the head of the bone out, placed my right hand upon it and felt it to be unmistakably the head. Dr. Burwell was then invited to place his hand upon it which he did; as did also Drs. Hopkins, Bartow and Diehl. They placed their hands upon the head of the femur

and recognized what they felt to be the head of the femur. Dr. Hauenstien was engaged in giving chloroform, and I am unable to state whether or no he placed his hand there.

There could be no mistake here as to the fact. Not one of the physicians made any doubt at the time, that the hip-bone was out of its socket. The evidence adduced is, as you will observe the best possible evidence at the Surgeon's command, viz: the direct demonstrative evidence of the senses; and the force of it is augmented to the highest degree by the concurrent touch of five physicians.

I then resumed manipulations for the purpose of reducing the luxation, after frequent failures I finally succeeded. I felt the head of the bone slip into the acetabulum as I supposed. All signs of dislocation now disappeared. The freest eversion became at once possible. There was no shortening perceptible, for the time being.

Well, what was the upshot of it all? As a matter of course Bergman suffered a few days from the prolonged use of the chloroform, from the breaking up of the old adhesions, and the repeated manipulations; but at the end of seventeen days the dressings were removed and the man was allowed to go about with the aid of crutches. His pains had vanished, and the oedema, the ulcers and scales rapidly disappeared from his legs.

Drs. Loomis, Hauenstein, Hopkins and Bartow, were at one time present in the court-room during the recent trial to corroborate my testimony in the above particulars. But inasmuch as the plaintiff's counsel rested the case on my testimony, they were ruled out on the ground that to take their evidence on this point would be a reopening of the case. It is accordingly obvious that the test-facts in the whole business were not developed in all their force by the late contest at law.

On October 13th, four and a half months after the dislocation was reduced, a commission of experts, consisting of Drs. Moore, White, Miner and Rochester, was appointed by the court to examine the man Bergman. These gentlemen proceeded to measure Bergman's legs, and their measurements varied, as I have testified from $\frac{1}{4}$ of an inch to $2\frac{1}{8}$ inches; these figures were furnished

me by Dr. Nichell; so that the first measurement of Dr. White differs from the last measurement of Dr. Miner by *one inch and seven-eighths*. These gentlemen however, finally agreed upon *two inches* as the amount of actual shortening. This discrepancy between their successive measurements is not so ludicrous as it might at first seem; on the contrary, it possesses considerable medico-legal importance, and I therefore call attention to it.

The existing shortening is from the most careful measurement the writer can make, $1\frac{1}{2}$ inches at the most. It will fall below this by half an inch, rather than exceed it by any fractional part of an inch. To be surgically accurate, I would add that when this man sets, lies or stands, shortening is scarcely discernible; i. e. when the heels are brought together they show nearly or quite equal length of limbs. Dr. Moore made another important measurement, viz: that "from the major trochanter to the superior spinous process of the ilium." The distance on the injured side was found to be $\frac{1}{2}$ inch shorter than upon the other. The patient was also "made to walk across the room;" a feat he would have hardly accomplished previous to the reduction of the bone.

In what position, then, is the commission of experts. They are simply in possession of two facts of significance; first, that there are 2 (?) inches shortening of Bergman's left leg; second, that the trochanter is $\frac{1}{2}$ inch nearer the anterior superior spine of the ilium than it should be. This is the sum-total of their knowledge as acquired by actual observation. They can go back from the present state of things to a past one only by inferences, by probable reasonings. And I beg leave to insist upon this contrast between the two kinds of evidence presented. The writer and those physicians present at the reduction of the bone, speak with certainty of a luxation, because they had the *demonstration* of it; they handled the dislocated head of the femur. The commission can only supply *inferences*, can only state what was the probable or improbable condition of the joint during the period which followed the injury. For although Dr. Miner had seen the case prior to October 13th, he himself testifies that he had never previously examined the joint for either fracture or dislocation.

But what theory of the case does the commission of experts pro-

pose? It reads thus; "there was no dislocation, but on the contrary an *impacted intra-capsular fracture*, which at an early date before separation of the impacted fragments and shortening took place might have been easily overlooked," and it is added that "the treatment adopted by the defendant, in a man of Bergman's age, viz: rest in bed and liniments, was as good as any." In other words, Bergman lay in bed from August 31st, 1875, to May 26th, 1876, nearly *nine* months with an impacted intra-capsula fracture, under a treatment for the first week that was "as good as any" and with no treatment especially differing from the same (so far as the joint was concerned) during the remainder of the period of nine months without amendment, nay, suffering great pain and almost rotting to death, but when (mark the contrast) a severe operation for the reduction of a dislocated bone—a *wrong* operation—was performed on him May 26th, his pains cease, his bloated extremities resume a normal size, the sores upon them begin to heal and his health improves steadily, all during the space of seventeen days. If such results come of a *wrong* treatment, what patient would prefer a *right* one? Were results alone to be considered, the theory of the commission of experts might be promptly pronounced weak and untenable.

Dr. Miner testifies as follows: "When the neck was fractured within the capsule *some surgeons* formerly claimed that no bony union took place. * * * In *numerous* cases I think it is united by *bone*, and when united, it is just as perfect" &c. Again, "the neck *unites by bone* or ligament in *nearly* its old position" &c. Did Dr. Miner really mean the Jury to understand that in the case of Bergman—61 years old—an intra-capsular fracture would within any range of likelihood unite by *bone*, and leave such a perfect condition of things as he describes? If Bergman is too old for dislocation, surely he is too old for such a reparative feat as that. Such suggestions may be palmed off on a non-medical jury, but hardly upon a physician of tolerable information. But, after all, *is* the present status of Bergman's hip-joint inexplicable on the supposition that the bone was reduced by me on the 26th of May last? Before answering in detail, allow me to notice a sentence I have come across on your editorial page; "Dr. Gay now candidly

says that he did not reduce the dislocation." Nothing could leave a false impression behind it than such a statement. I affirm most positively that on the 18th of May, I found the head of the femur upon the dorsum ilii, that on the 26th, I manipulated to reduce the bone, and that in virtue of my efforts on that day the head of the femur was removed from the dorsum. At the time I felt confident that it had gone into the acetabulum. Subsequently I began to fear that I had been less successful than I hoped, and that the head might have gone into the ischiatic notch. It is well known that such an event may befall any surgeon, and that the operator should be on his guard to forestall it. I affirm that at present the bone is either in its proper socket or in the ischiatic notch. Even if it be in the latter, the operation has been an unmixed benefit to Bergman, since the bone will in time there create for itself a good joint, indeed the "mobility of the leg and the smoothness of the joint surface," which Dr Miner found, would argue that such a joint is already formed. 'Tis of no great account for the question at issue, whether the head be now in the acetabulum or in the notch. That question is this. Was there a fracture or a dislocation? It is quite as subversive of the theory that there was no dislocation to have removed the head of the femur from the dorsum ilii into the ischiatic notch as into the acetabulum. One of these two things I have certainly done. I have therefore disproved any such theory.

And now let me answer the question previously propounded.

First.—Can the present status of the hip-joint be explained on the hypothesis, that the head was reduced into the acetabulum?

Second.—Can it be explained on the theory that it passed into the ischiatic notch?

If no shortening of limb had occurred, it is safe to say there would have arisen no disputation as to the fact of dislocation.

No attempt was made at the recent trial to account for shortening on the hypothesis of reduction into the acetabulum, and since discussion of this question would make this communication of too great length I defer it for a separate article, and proceed at once to answer the second question propounded above, viz:

Is the head of the femur in the ischiatic notch?

It is the unanimous testimony of a majority of the expert commission that the head of the femur is now in the acetabulum and not in the ischiatic notch. This opinion they base upon the fact of perfect "mobility" of the limb and "smoothness of the joint-surfaces" etc. But it must be remembered these gentlemen never examined this man with a view to ascertain whether the head of the femur was lodged in the notch or not. It is fair to presume—since they were so intent upon obtaining all the shortening possible,—that they never thought of examining the limb in order to ascertain if the head was in the notch.

Now what are the signs and symptoms denoting ischiatic displacement. I find the following, viz: 1st, shortening; 2d, Syme's curves; 3d, $\frac{3}{4}$ of an inch approximation of the trochanter major to the mesial line of the spine upon the left side, with $\frac{1}{2}$ inch approximation of "the trochanter to anterior spine, according to Moore's measurement. Mr. Syme has called attention (Hamilton) to what he considers as one of the most important diagnostic marks; indeed, he says it is never absent, nor is it ever met with in any other injury of the hip-joint, whether dislocation, fracture or bruise; this is the lumber arch."

I can do no more, at present, than call attention to these signs, leaving to the decision of your readers the question, whether or not they should be disrespected.

When the results of the treatment of this interesting surgical case are considered, I have no fear whatever of detracting "from him (myself) of a certain amount of merit," &c., * * whether the head of the femur be lodged in the acetabulum or ischiatic notch. The merit, should any be accorded, I think will consist in having discovered an ancient dislocation upon the dorsum ilii, and in having promptly reduced the head of the bone from the dorsum, if not into the acetabulum—into the ischiatic notch where the joint seems almost as perfect as before the injury.

Reciprocating fully, Mr. Editor, your expressions of kindly personal regards, I am,

Truly yours,

Buffalo, N. Y.,

CHARLES C. F. GAY.

MISCELLANEOUS.

Salicylate of Soda in Rheumatism.

By A. CLARK, M. D.,

Prof. of Pathology and Practical Medicine, College of Physicians and Surgeons, N. Y.

Owing to the interest excited by the recommendation of salicylic acid in rheumatism, the following will be of interest.—(Ed.)

My acquaintance with practice in the New York hospitals began in 1834. Since that time, either at home or abroad, officially or as a volunteer, I have been a very frequent visitor at one or more of these, or similar institutions. In this period of forty-four years the treatment of acute rheumatism has undergone many changes.

At first colchicum and *actæa racemosa*, in tincture, separately or united, were generally relied on; calomel was at the same time often prescribed. After these followed quinine in full doses; then the nitrate of potash, an ounce or more daily, dissolved in a quart or more of water. The free use of lemon-juice was next tried. So far there was reason to doubt whether any of these medicines, except colchicum, aided much in the cure; in other words, whether the disease, after running a certain course, did not terminate spontaneously. The curative effects of colchicum, in full doses, during all these changes were often demonstrated, but serious accidents were occurring in its use, and the profession was searching for a safer treatment.

At length Dr. Fuller, of London, proposed and advocated the alkaline method. The carbonates, or convertible salts of soda and potash, were given in such quantity as to make the urine alkaline in two or three days. Then it really seemed as if we had found a safe and speedy remedy. There were cases that resisted it, but the greater number yielded. The pain subsided on the second, third, or fourth day, the stiffness remaining a day or two longer. This result, so far as it could be obtained, was a great gain. It has been observed that acute inflammations of the pericardium and endocardium which attend acute articular rheumatism, are disposed to wait till the fifth day of the primary disease, or even longer time. To cure the primary disease before the fifth day is, in a great majority of cases, to prevent the cardiac complications. It is true that in rare instances the cardiac inflammations have been the first manifestation of the rheumatic diathesis, the affection of the joints following one or more days after. It is equally true that the car-

diac inflammations have followed that of the joints earlier than the fifth day. Still, the rule has an application sufficiently extended to illustrate one of the important advantages of the Fuller treatment.

Lately the claims of salicylic acid to the first place among the anti-rheumatics have been strongly urged. The following report of its use at Bellevue Hospital may help the profession to form a judgment regarding its virtues. It embraces all the cases received in my wards, from the 1st of April to the 1st of June, that could be called *acute* rheumatism—eleven in all. Short abstracts from the records of these cases have been made at my request by Dr. Kendall and his assistants, from the Hospital Case-Books. Each is full enough to show the general effects of the medicine; but as the effect of it on the temperature and pulse is not always mentioned, I can add that its influence in lowering the fever heat and diminishing the excited pulse were as marked as its power to relieve pain; apparently because it neutralized the rheumatism-poison, and removed the cause of these disturbances. In the tenth case "*no impression* was made on the disease" for eight days.

The formula used in all these cases is the following:

℞ Acid. salicylic	3 iij.
Sodæ bicarbonat	3 ij.
Glycerine,	
Aq	āā 3 ij.
M.	

Of this a tablespoonful was given every two hours for the first day, and afterwards the same quantity six times a day. It is not claimed that this is a perfect salicylate of soda. It was prepared rather rudely by the house-physician, not with reference to atomic neutralizing proportions, but by adding the soda to the suspended acid till he obtained a clear solution. It may be atomically correct or it may not; it matters little, as the combination appears to have curative power. This treatment was begun by Dr. Jacobi, and followed up by me. This report does not include any of Dr. Jacobi's cases, but the house-physician informs me that his results were almost exactly parallel with those here noted. It must be added that in both classes of cases, whenever the joints were very painful, compresses, kept cool by frequent dipping in cold water, were applied to them.

Salicylic acid alone is reported to have cured rheumatism; soda alone cures it; and the formula given here might be considered a union of Fuller's with Stryker's treatment, were it not that the urine has not been noticed to be alkaline, and that the quantity usually taken, even it separated from its acid, is hardly enough to produce alkalinity.

In view of nervous symptoms, more or less alarming, that have been reported as following the use of salicylic acid in some cases; (see Dr. Caro's case, *Med. Record* a few weeks ago); it is important

to state that no such results have been noticed at the hospital in those who have taken this salicylate; indeed, no unpleasant affects of any kind have been witnessed, though the quantity of the drug administered is large. I will make no comment on the cases, further than to say that in nine of the eleven the curative action of the medicine was early seen; in two this action was slow and incomplete.

CASE 1.—John Clark, æt. 24; single; Ireland; waiter. Admitted April 15, 1876. One previous attack, three years ago. Present began five weeks ago, with pain in soles of feet and some swelling; malaise. Left work three weeks ago. Six days before admission, pain and swelling in knees; since in ankles, hips, elbows, shoulders; right wrist and back affected. On admission knees and ankles moderately swollen, hot and tender, Temp. $102\frac{1}{2}$. Ordered the salicylate as above, with cold compresses to painful joints. April 17th, much improved; some muscular tenderness, and pain in left shoulder only remaining. No more symptoms referable to rheumatism developed, and April 26th, eleven days after admission, *discharged cured*.

This patient had a heart murmur whose connection with present attack is very doubtful.

CASE 2.—Chas. Quinn, æt. 22; single; United States; kindling wood. Admitted April 19, 1876. Has had gonorrhœa twice, with rheumatism. Had an acute non-specific attack six years ago, in this Hospital. On admission for present attack, suffering from pain and swelling in left knee and carpo-metacarpal joint of left thumb. Attack began with chill and sweat yesterday. Mitral systolic and aortic direct murmurs. Some pain in præcordia, no friction. Ordered usual treatment. In 24 hours improvement very marked; no pain. On April 22d, three days after admission, discharged, very much improved. Duration of attack, four days; duration of treatment, three days; result, cure (?).

CASE 3.—Wm. H. Welwood; æt. 34; single; United States; horse-dealer. Admitted April 13, 1876. Several previous attacks, subacute in character, with, however, complete recovery. Present attack began eight days ago in right knee, followed soon by pain and swelling in nearly all the joints of body. Was not confined to bed. On admission, left elbow (the only joint much affected) swollen, hot and tender. Temp. 102. Heart normal. Ordered usual treatment. On following day affected joint normal, but stiffness of same joint of opposite side. No further extension or development. On April 17th, four days after admission, discharged cured. Under treatment four days.

CASE 4.—H. Heneoer, æt. 30; single; United States; laborer. Admitted April 13, 1876. No history of previous rheumatic attacks. Three days before admission both ankles became swollen, hot and tender. On admission, ankles somewhat swollen and tender. No other joints involved. Temp. $102\frac{1}{2}$. Heart normal. Ordered

usual treatment. On following day much better; some tenderness yet. Temperature normal. Treatment continued; improvement rapid, and on April 24th patient discharged cured. In hospital eleven days.

CASE 5.—E. Shultze, æt. 28; single; German; bartender. Admitted May 3, 1876. Father had rheumatism; died of cardiac disease. History of seven previous attacks; last in this hospital and in this division.

Present attack began six days ago in ankles; swelling, tenderness, and pain, followed by same in all joints of extremities. On admission, wrists swollen and tender, right elbow very tender, and all joints and limbs stiff. Temp. $103\frac{1}{2}$, pulse 103. Mitral regurgitant murmur. Ordered usual treatment. On following day much better; temp., 101° . May 6, swelling gone; some pain in loins and over heart. May 7, developed symptoms of alcoholism, and was treated accordingly (pot. bromid., etc.). May 10, feels all right, except some soreness in two fingers of left hand. May 16, except stiffness in shoulders, well. May 31, all symptoms absent, except slight stiffness of knees, which disappeared after exercise. Is apparently well. June 3, discharged cured.

CASE 6.—Albert Callender, æt. 27; Sweden; laborer. Admitted May 24, 1876. One previous attack, six or seven years ago; present attack began four days ago, after exposure to wet and cold. Began in toes of right foot, swollen and painful; followed by pain and swelling of ankles. Then knees, shoulders, and thumbs became successively involved. Ankles and knees much swollen this morning. Had two profuse sweats before admission. On admission, above condition found. Ordered usual treatment. Cold locally, there being much pain. May 25, patient much better. No pain, except a little in knees. May 27, no pain, no swelling. May 29, discharged cured.

This patient gave a history of dyspnœa on exertion, with frequent spitting of blood, always after exertion. On examination, a mitral obstructive murmur found. Dyspnœa, etc., had existed for four years prior to present attack.

CASE 7.—Walter Houseman, æt. 49; single; United States; driver. Admitted May 17, 1876. Brothers and sisters have had "rheumatism." Patient has had numerous attacks like the present. Present attack began one week ago. Shoulder and hand of right side became swollen and tender. On admission, right hand and two middle fingers of same side swollen and red. Little finger much deformed by previous attacks, as also the others, though in less degree. No fever. Ordered usual treatment.

May 20, swelling in hand much less. Very little pain. Beginning to move fingers.

May 20, everything gone but deformity, which existed prior to present attack. He is therefore discharged cured. In hospital

thirteen days. There was no evidence of gout other than the residual deformity.

CASE 8.—Timothy Rundell, æt. 26; single; Ireland; laborer. Admitted May 23, 1876. No previous attack. Present attack began three days ago in malaise, etc., followed by stiffness on morning of May 21. Stiffness soon followed by severe pain in both knees and ankles, with considerable fever. Left wrist was soon affected and corresponding elbow. Heart has not troubled him. On admission, above joints were found tender and painful on motion; left wrist and left foot somewhat swollen and red. Ordered usual treatment. Temp. on admission, 103½. May 24, leg same; left wrist better. Back, right wrist, fingers, and elbow getting stiff and sore. No improvement. Heart normal. May 25, considerable improvement. All joints of right arm sore but not swollen. Temp., 102°. May 26, very little pain. Joints weak. May 31, joints of arms stiff since last note. No more pain. Temp. normal. June 2, still some stiffness in shoulders. Otherwise well. Treatment continued. June 5, feels perfectly well; is, therefore, discharged cured. In hospital twelve days.

CASE 9.—Ellen Ryan, æt. 48; married; Ireland; domestic. Admitted May 18, 1876. No history of previous attack. Present attack began three weeks ago in right shoulder. Since then, all joints of extremities have suffered, together with certain muscles. Very little swelling has existed.

On admission, has pain in all joints, but most marked in arms. No swelling of joints except those of right arm, which are swollen and painful. Ordered usual treatment. May 20, much improved. Right arm and left leg (joints) painful only on motion. Affection finally located in shoulders and persisted. Ordered battery as adjuvant to acid. Preferred discharge to use of battery, and was discharged, May 27, improved. Under treatment nine days.

CASE 10.—W. H. Higgins, æt. 20; United states; deck hand. Admitted April 14, 1876. No history of previous attack. Present attack began April 1, in right hip; subsequently all the joints. Lower extremities painful and stiff. Left work to day. On admission, is suffering from intense pain in left ankle, which is swollen, hot, and tender. Ordered usual treatment. Improvement in this case was very slow, and no sensible impression made on disease until April 22d, when, with exception of left ankle, symptoms had subsided. Swelling and tenderness persisted here (left ankle), and on May 1, lin. sap. co. and douching ordered. Not much benefit derived from them. Subsequently, tincture of iodine added externally. Slowly improved, and on May 20 was discharged improved.

The acid was continued up to time of discharge.

Under treatment thirty-six days.

CASE 11.—H. G. Phelps, æt. 38; England; printer. Admitted April 17, 1876. Has had repeated attacks of subacute rheumatism.

Twelve days before admission present attack began in right instep, swollen and tender; subsequently "all the joints of body" became involved. Was in bed one week before admission. On admission, all joints somewhat stiff and sore. Ankles and knees slightly swollen. Heart normal. Usual treatment employed. On following day much better. Continued to improve, and on April 24, was discharged cured. In hospital six days.

October 6, 1877. The same treatment has been continued in the first medical division of the hospital, since the date of the last case, above noted, with no change in the results; except, that in two instances, a certain amount of deafness has been produced, like that which follows full doses of quinine, transient, and in the second case, which I examined yesterday, slight in degree.—*Medical Record*.

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The Fascia Lata; its use in Standing at Rest; its Value in the Diagnosis of Fracture of the Neck of the Femur.

By OSCAR H. ALLIS, M. D., Surgeon to the Presbyterian Hospital, Philadelphia, Pa.

The problem of standing and at the same time placing the muscles of the lower or hinder extremities at rest, is one beautifully wrought out in the higher order of animals. Those whose bodies are near the ground, and upon which the necessity of lying down and rising again entails no inconvenience, have no need of such a rest. But the larger and more useful animals would suffer great inconvenience and great fatigue if they had no other way of resting than by lying down. Take the horse for instance. Farriers relate of some of them that they have never been known to lie down; that neither the bedding nor the body of the animal has shown at any time evidence of his lying, night or day. And, what is quite as remarkable, they say that horses accustomed to lie down will never do so when they are sick; and that when a sick horse lies down it is very likely never to rise again.

The remarkable feature of this will be somewhat cleared up if we will but note the attitude of the horse when *resting*. The fore part of the body lies as in a swing supported by large strong muscles, and when the horse is resting these relax until their fasciæ and sheaths become supporting tendons. A horse is *not so tall* when he is asleep or resting as when awake and active. This may be verified by taking the measurement at the shoulders when he is quiet and at rest, and a second measurement after *waking him up with a blow from the whip*.

But it is to the hind legs of the horse that I would call attention, as there is a strong analogy between the manner of standing at rest in the lower animals and in man. If you notice the horse you will see that he throws the weight of the hinder part of his body on one leg, while he seems to balance himself by resting the other limb on the tip of the hoof. In a few moments he changes his position, throwing the weight upon the other limb. Thus the entire body is rested almost as perfectly and completely as in lying down. Such an arrangement for resting while in the erect posture is possessed by man, though not to the same degree. I have merely directed attention to the most familiar illustration, that in the case of man it might be the better understood.

When we wish to rest ourselves in the erect posture, we first balance the lower extremity upon the foot. This done, we lock the knee-joint *after the fashion of a carriage top hinge*. With the limb balanced on the foot and the knee locked, we cast the body a little to one side, when we experience a sudden arrest of the body. One thing more, and the act is complete. The unoccupied limb is cast a little in front and away from its fellow, as if to poise or balance the body, and we are at rest *absolutely* so far as the muscles of locomotion are concerned. We remain in this position until a sense of weariness comes over us, when we change the limbs and reverse the attitude. Sometimes we vary this by leaning the body against some firm object, but in all these positions the muscles of locomotion are unemployed. In this *resting* posture a portion of the fascia lata takes the place of the muscles in sustaining the body, giving the latter the rest we instinctively avail ourselves of.

This fascia lata forms a sheath for all the muscles of the thigh, binding them up in groups, and bringing them into immediate harmony with one another and the femur. Its thinnest portion is at the inner aspect of the thigh where it forms the deep fascia of the adductors. It is much stronger in the sheaths formed for the special muscles of locomotion,—*i. e.*, the flexors and extensors. To enable these muscles to act at greatest advantage, this fascia can be made tense by two strong muscles, the tensor vaginae femoris and gluteus maximus, so that whenever we stand erect, walk, or run, these two muscles are chiefly concerned in regulating the tension of the femoral aponeurosis. One can easily verify the accuracy of this if while walking or standing he will place his hand upon the out side of the knee, just above the articulation. Here he will find a strong firm tendon, attached to the outer tuberosity of the tibia, that will harden with each step, and become especially prominent.

This tendon-like structure, which is so prominent in the erect but which almost disappears in the sitting posture, is a portion of the fascia lata. If one will carefully trace upward this tendon, he will find that it extends to the crest of the ilium, and in its

course passes over the great trochanter. This portion of the fascia lata is the strongest, firmest, and thickest of any part of it, and there is a special reason for its great strength. When a person is obliged to stand for any length of time, he finds himself resting on one limb. This resting is in no respect a muscular act, but is accomplished by *pressing the great trochanter against this thickest part of the fascia lata*. If the reader is in the least skeptical upon this point, let him stand up and, resting himself upon one limb, feel the tendon on the outer side of the knee. Let him change to the other limb and see how prominent the corresponding structure becomes. Let him do this quickly, throwing his weight alternately upon one and the other limb, and *notice the suddenness* with which he is arrested. *If this were muscular, the rest would not be so complete. If muscular, the stoppage would not be so sudden. If muscular, I could not verify the experiment upon the cadaver, as I have often done.* All that is necessary is to secure the knee in splints, and the resting attitude can be perfectly counterfeited in the cadaver.

It will thus be seen that when standing *erect*, walking, or running, the act is purely *muscular*, but that man, like the lower animals, has means of resting himself while in the upright position.

This curious and beneficent provision can be turned to good account in fracture of the neck of the thigh. Let the patient stand before you resting his hands upon a table or chair. Notice that *his limbs are parallel, and that both feet rest symmetrically upon the floor*. Now, if there is fracture of the neck, the fascia lata will be tense upon the side of the sound limb, but the *tensor muscles* have no firm *point of resistance* in the fractured one, and cannot make this femoral fascia tense, as in the other limb. Owing to this the examiner will find that the fascia will offer no resistance to an examination of the head of the great trochanter, as it does in the sound state, but is lax, and can be easily indented. He will also notice that the tendon on the outer side of the knee will possess no corresponding prominence with that of the sound limb.

It is necessary that the patient stand while this observation is being tested, for in the erect posture the fascia lata lends its support to the other muscles. In the reclining posture all the muscles are at rest, and hence this feature disappears.

This matter has been under observation for two years, and I am satisfied from repeated verifications that it possesses diagnostic value.

In dislocations the limbs can *never* assume parallelism. The injured limb must *always* stand off from its fellow. Hence I have been particular to state that the observer should note that the limbs are parallel, and that both feet rest symmetrically upon the floor.

One other point of some value. Let the patient lie on his belly. Tell him to press the pelvis into the bed,—i. e., to hug the bed.

In doing this the great gluteus of the sound limb will make a great dimple, but, owing to the shortening of the limb and the want of resistance on the part of the femur, this dimple will be absent on the fractured side.—*Phila. Med. Times.*

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Vaginal Ovariectomy.

By CLIFTON E. WING, M. D.

On February 10, 1876, I saw with Dr. Spalding, of Lowell (the physician of the patient), and my partner, Dr. Warner, a lady whose history was as follows: She was thirty-two years old, unmarried, and was never very strong. The menses began at fourteen, were always regular, but accompanied by considerable pain. Twelve years ago, at the age of twenty, after lifting a heavy weight she began to suffer pains in the back and across the lower part of the abdomen, which became much worse during the monthly period, and had so increased that for the last six years the patient had been obliged to resort to the use of morphine, and, at times, to etherization, when unwell. Five years ago a local examination showed a retroverted uterus, for which passaries were tried without much result, and a year later a body was felt in Douglas's cul-de-sac, which was thought at the time, by Dr. H. R. Storer, who saw the patient, to be ovary. For two years the patient was confined to her room, and part of the time to her bed, by her sufferings, but for the last year or two she has been better, and able to go about a little. She is habitually constipated, and defæcation, even after the use of enemata, is very painful. Micturition frequent, appetite poor, no febrile symptoms, patient emaciated and is in a miserable condition.

An elastic but not distinctly fluctuating mass was felt in Douglas's cul-de-sac, pressing the uterus forward towards the pubes. The fundus uteri was turned somewhat backward, but movable with the sound. The latter entered to the normal depth. With the patient under ether the tumor could not be pressed from its position, and previous efforts in the same direction had failed. Examination per rectum showed that the mass pressed the bowel against the sacrum, and explained the constipation and painful defæcation.

An aspirator needle was passed into the mass from the vagina, but only a small amount of dark bloody fluid was withdrawn. Dr. E. G. Cutler kindly examined this and reported as follows: "The fluid (about two drachms in quantity) contained a large percentage of albumen. Under the the microscope many red blood corpuscles

were seen which had lost their characteristic shape and had become irregular crenated. The surfaces of many showed a few spots not unlike small globules of fat [?]. In addition were seen numerous granular cells in various stages of fatty degeneration, varying in size from that of a white corpuscle to double that size. Hæmatin crystals; no others. Diagnosis fluid, old hæmorrhagic effusion."

The tapping was not followed by any symptoms.

March 30th. The tumor remaining the same, the aspirator was again used, and this time several ounces of the same fluid were removed, and the mass much diminished in size. This second tapping was not followed by improvement; on the contrary, some time afterwards the patient began having occasional slight chills followed by fever, nausea, had headaches; in fact, a mild septicæmia. She continued to lose strength and appetite, though not confined to bed.

When next seen, April 19th, an examination showed the mass behind the uterus to be as large as ever, and more tense and cyst-like. Upon passing an exploring needle from the vagina, as before, a few drops of exceedingly offensive matter escaped. It was evident that the fluid must be thoroughly evacuated, whether it came from an old hæmatocele or from hæmorrhagic ovarian cyst, one of which seemed to be present.

With the aid of Sim's speculum and position, the parts being well drawn down towards the vulva with tenacula, and care being taken to avoid wounding the rectum, an opening was made through the upper part of the vagina and the peritoneum into Douglas's cul-de-sac. Passing my finger through this I distinctly made out a small ovarian cyst, about the size of an orange, fixed in the cul-de-sac by some loose adhesions which easily gave way before my finger. The opening having been enlarged, the cyst was seized with strong forceps, opened and evacuated, then twisted to diminish its size, and pulled through into the vagina. There was no proper pedicle, but the uterus, tipping backward, allowed the broad ligament with the Fallopian tube to come well into the vagina. I intended here to apply a ligature and cut away the cyst, but Dr. Warner in making a digital examination, finding the attachments loose, attempted enucleation with his finger, succeeded in separating the tumor, and brought it away.

There was some bleeding, which soon ceased entirely, and as the uterus went forward the broad ligament slipped back into the abdominal cavity. No ligature whatever was used, but, a coil of small intestine appearing at the opening, I inserted three silk sutures and closed the wound sufficiently to prevent hernia, but left room to pass a catheter, should there be any collection to wash out. The patient was then put to bed.

April 20th. Patient came out of the ether well; had no shock, and passed a good night with the aid of morphine. Reports no

more pain than after the previous tapping. No bleeding, some slight chills, no nausea. Taking mild nourishment. Occasional shooting pains in pelvic region. Pulse 116 and good.

April 21st. Pulse 114, temperature $100\frac{1}{4}^{\circ}$ in axilla. Some abdominal distention and pain, and considerable tenderness, but patient moves limbs without much increase of pain. Thirsty, no chills, but nurse reports sweating. Tongue coated, and brown at edges. No appetite, but takes her food. Washed out cul-de-sac, using double catheter and getting away an ounce of fœtid fluid.

April 22d. Pulse 96, temperature $99\frac{1}{2}^{\circ}$, respiration 18. "Feeling better." Washed out more fœtid fluid. Menses appeared to-day, one week early.

April 23d. Pulse 96, temperature $100\frac{1}{4}^{\circ}$. Poor night, with pain in lower abdomen, but better to-day.

April 24th. Pulse 96, temperature $99\frac{1}{2}^{\circ}$. Patient reports herself nicely. In washing out cul-de-sac, which is done daily, some sloughy tissue came away to-day.

April 25th. Pulse and temperature normal.

April 29th. Bowels have been moved twice by enemata. Pure pus came from wound, which is granulating. Remove the sutures. Catheterization of the bladder, for a time necessary, now dispensed with. To have vaginal injections in place of washing out with catheter.

May 6th. Touched granulations with caustic.

May 18th. Wound closed. Patient walking about the house, and dismissed.

Her rapid recovery was due in great measure to careful watching and faithful attendance on the part of Dr. Spalding after the operation.

I met the lady, for the first time since May, a day or two ago. She was no longer using morphine, and was increasing in weight and strength. The menses had been regular since the operation except within the last two months, when the flow had appeared every three weeks. This she attributed to the fact that, through illness in the family, the cares of the household had devolved upon her, and, as she expressed it, she had been obliged to be on her feet and running up and down stairs from morning until night. To the same cause she attributed a backache which she had for a week or more, having been previously free from it.—*Boston Med. and Surg. Journal.*

Some Practical Observations on the Differential Diagnosis and Treatment of Croup and Diphtheria.

By WILLIAM S. STEWART, M. D.

GENTLEMEN:—In the early part of this session of interesting and instructive meeting of our Society, I had the honor of being present to hear our learned brother read a paper on the subject, "Are Croup and Diphtheria Identical?" which you will find published in No. 213, vol. vi., of the *Medical Times*. It is well worth its place in all our libraries.

After listening to the discussion which followed, the incredulity expressed, and the effects produced upon the mind of others, perhaps, as well as on myself, I thought the subject, in relation to the general practitioner, too important to admit of any doubts, and that it deserves to be discussed and re-discussed until we are assured of the nature of both diseases, as we come in contact with them more or less every day.

I will not presume to review the ground gone over by my colleague in regard to the anatomical situations, the microscopic and chemical conditions, of the membranes formed; but rather trust in the evidence which we have when ushered into the chamber where all are anxiously intent on the announcement of the physician as to the nature of the disease that has already made an inroad in their happy home, and which, according to statistics, carry away so many of our dear ones.

In the discussion of this subject to which I have referred, the following language was used: "Probably only one out of twenty cases meet with and considered as croup would really be that affection. A physician would see twenty cases of diphtheria before he would see one case of true pseudo membranous laryngitis." If that is true, I fear there are many errors in the diagnosis of that disease.

I am disposed to think that there are as many cases of genuine croup to-day as there ever were. I am sure, however, that we are not called upon to treat all the cases that do occur, since almost every mother is able to recognize it in its inception, and, being apprehensive of its invasion, is always prepared to combat it with suitable remedies.

Another evidence of this fact is, when sent for to see a case, instead of being requested to see a certain one who is sick, the messenger says, Come quickly, for Johnny, or Mary, or whoever it may be, has the croup, which implies not only that they are familiar with the disease, but have probably exhausted all the various domestic remedies for its arrest.

It is not a rare occurrence to be called in to see some individual in a family where, the night previous, perhaps, some other member of the same family has had an attack of croup and was treated successfully without any physician.

I think it very probable that the majority of cases of croup are so treated.

This can only be accounted for from the fact of the frequent occurrence of the disease, and the unseasonable hour to call in a physician, and the necessity for prompt measures being at once adopted.

I wish, before entering upon the discussion, to refer to another remark made in regard to diphtheria. That is, "I think there is more diphtheria in the minds of the physicians than in the throats of the patients."

I hope that remark is not applicable to any of the members of the regular profession, as it certainly reflects either incapacity or deception, neither of which ought to be tolerated among the conscientious and scientific, but both of which are almost necessary to the irregular and the quack.

It is practical knowledge that is needed, with a great deal of uncommon good sense, in order to arrive at distinction in any profession or calling; and especially is it the case in our profession, when we are regarded as the oracle whose decisions and directions are immutable, and the superiority of our remedies appearing of too high an order to descend even to our own familiar language. It seems to be a necessity that we resurrect the dead in order that we may minister to the living.

There seems to be a heavy cloud of mysticism which ought not to hang over the medical profession of to-day. I think the time has come when the intelligence of the community is sufficient to understand the what, the why, and the wherefore of our actions, and, consequently, could better appreciate the earnest efforts of the physician, and would not be so easily led astray by every new device that is placarded so as to allure the unsophisticated by its enticements. It is too true that in the allied profession there is much deception practised on the part of the doctor with his patients and friends, sometimes through ignorance and at other times by design, and from both causes, perhaps, are unwilling to give a disease its right name, but must magnify it so as to make the success of the treatment so astonishingly evident that its effects on the victim and his friends would be perfectly enchanting. Did you ever see such devotion as is exhibited by the converts to homœopathy? Is it not because "it is the God which they so ignorantly worship?"

In order, therefore, that the truth may be known, we must not only be educated ourselves, but we must be educators of those with whom we may be associated.

Before comparing these two diseases, I will first endeavor to define them separately.

Croup is inflammation of the trachea, which may extend up into the larynx or down into the bronchi. It occurs in young children after they are weaned, and is said to have a greater affinity for the male sex. The chief characteristic of croup is the formation of a membrane which lines the windpipe, the larynx, and bronchi as far as it extends. The gravity of the disease depends upon the obstruction produced by the membrane in respiration. The symptoms are generally ushered in after sunset or midnight; and is presumable that the disease is produced by a sudden chilling of the secretions of the body.

The first indications of the disease are symptoms of catarrh, with sneezing, coughing, and hoarseness. It is the last symptom which is the signal for attention.

The cough is of a loud, ringing character, resembling somewhat the sound of a frog or the bark of a dog, and is so evident that one who has never heard it could not fail to recognize the symptom; this continues until the breathing becomes difficult and stridulous. If the disease were not promptly arrested, it would soon prove fatal to its victim. Other symptoms which accompany the disease are high inflammatory fever, flushed face, hot skin, thirst, frequent and hard pulse.

There is no morbid appearance in the pharynx nor difficulty in swallowing.

I will not stop here to describe true and false croup as distinct diseases, as both depend upon the same causes and have like symptoms. Suffice it to say that there are modifications in all diseases according to the constitutions which they attack, and the real difference is in degree rather than kind.

As to the symptoms of diphtheria.

The disease is ushered in with a chill, more or less fever, no cough, enlargement of the glands of the neck and throat; the patient complains of sore throat, difficulty in deglutition, pain and aching all through the system, indisposition from prostration. On examining the throat, we find white patches of membranous exudation deposited on the tonsils, it may be swollen flabulous uvula, the whole cavity of the upper jaw generally dotted over with fine drops of clear exudation. Sometimes we find a long membranous band extending down from the posterior nares, which is soft but very tenacious. As the disease progresses, the whole of the throat becomes involved. Not only does the uvula become covered, the roof of the mouth, the tonsils, the back part of the pharynx, but the disease extends up through the posterior nares until the whole passage-way of the nose is almost if not altogether closed.

The putridity of this membrane when left undisturbed is very offensive, and has a characteristic odor which, to a person of an acute organ of smell, can be recognized in entering the chamber.

I think it is, in my experience, as easily detected on first visit as the odor of a well-developed case of variola.

I wish particularly to call your attention to the fine drops of exudation, perhaps the size of a pin's head, which are frequently found dotting the upper and posterior part of the mouth, resembling somewhat drops of perspiration.

This is, to me, a certain indication of diphtheria. I have seen cases, where that condition was left undisturbed, and the deposit kept developing until the drops coalesced and united into one coagulated band that extended over the entire roof of the mouth with such evenness that it would evade your closest scrutiny were your attention not especially directed to it or you apprehensive of such a condition.

In contrasting the two diseases we find the following dissimilarity:

Croup is ushered in by a cough.

Diphtheria by a chill.

Croup is most frequent when there is greater humidity in the atmosphere and the east wind is prevailing.

Diphtheria does not depend upon meteorological changes.

Croup is not contagious.

Diphtheria most decidedly is.

Croup comes on suddenly.

Diphtheria may be tardy.

Croup is recognized by the croaking sound.

Diphtheria is known by the patches of membrane on the throat.

Croup must be promptly relieved.

Diphtheria is tardy in its resolution.

Croup does not affect the system.

Diphtheria is very prostrating.

Croup occurs most frequently in childhood and from two to five years.

Diphtheria occurs at all ages.

Croup is apt to occur very often in the same case.

Diphtheria may occur more than once in the same case, but the patient is not so liable to a second attack.

I might add also the contrast in the chemical condition of the urine and the blood, but, as that was referred to in Dr. Welch's paper, I will simply mention that the urine is not affected in croup, but in diphtheria it becomes albuminous. So also in the blood there may be an increase of normal constituent, fibrine, in croup, but in diphtheria there is a morbid condition of the blood not determined by increase of a normal constituent, and produced only by poison in the system. In consequence of the above conditions there are no offensive exhalations arising from croup, which are very manifest in diphtheria.—*Phil. Med. Times*.

Owing to the length of the paper some interesting remarks on treatment are omitted.

Clinical Conversations on Diseases of the Skin.

By L. D. BUCKLEY, M. D. Reported by Robert Campbell, M. D., Clinical Assistant.

CASE I. *Psoriasis punctata*. This man, aged 32, exhibits an eruption, which, while it should offer no difficulty in diagnosis, might on superficial observation perplex one not familiar with the disease in all its features. Psoriasis is very rightly associated in the minds of most physicians with circular patches of diseased tissue, reddened bases with an abundance of silvery imbricated scales, readily detached, the eruption being most marked upon the elbows and knees; the patches are usually thought of as of good size, from an inch upward in diameter. The eruption on this man, as you see, has spared the knees entirely, the elbows being very slightly affected, while a large share of the body is thickly sprinkled with these small reddish dots of various sizes, most of them not larger in diameter than that of a split pea, the largest being hardly as large as one's thumb-nail; the smallest hardly larger than a large pin-head. Moreover most of them present very little of scale. But on scraping each of these little spots you get a small amount of the same silvery scale obtainable from large patches, and on further removing this we find at least a little pellicle which slips off, and beneath we have the exposed corium which bleeds with slight irritation.

Now what are the features distinguishing this case to be psoriasis, for this disease may be confounded with the scaly syphiloderma, chronic scaly eczema, tinea circinata, and possibly (though hardly in this country), with lupus erythematosus.

Syphilis is excluded by the absence of specific history and by the fact that he has had the eruption on several occasions dating back five years. A syphilitic eruption never repeats itself in exactly the same form. But the appearance of the eruption itself is quite characteristic to the practised eye; you will never get such silvery scales on scraping a syphilitic eruption, nor just this bleeding state of the corium on scraping them off forcibly. The size of the single spots varies greatly from these minute, almost pin-head specks to these others, half of three-quarters of an inch in diameter on the body; those of syphilis are more uniform in size and medium between the extremes, they are more elevated than the flat squamous syphiloderma, less so than the later variety of tubercular character. The color is that of psoriasis and not of syphilis, the difference I cannot express in words truly, (for the historic copper-colored hue of syphilitic eruptions is somewhat of a myth,) you will learn to recognize the psoriasis shade by practice.

One could hardly mistake this eruption for any form of *eczema* if the entire eruption was exposed (as it always should be); scaly

eczema almost always has had a previous moist stage, this has always been dry. I have never known eczema to present so many isolated spots and as small. I have seen ringworms, *tinea circinata* covering the entire body, but such cases are very rare and the great extent of this eruption would readily distinguish it from the common forms, as also would a microscopic examination of the scales. I have never seen a case of *erythematous lupus* which could be confounded with psoriasis although authors mention it, nor do I know of any other disease which you could reasonably suspect this to be, unless it were *tinea* or *pityriasis versicolor*. But here the patches, which may be small and circular and extend even down upon the arms, are always brownish-fawn color, without a shade of red, and the microscopic demonstration of the vegetable parasite, *microsporon furfur* is very simple, and certain, when the *tinea* is present. The man says that this eruption appeared, on the last occasion, after bathing in salt water; I have a number of times known this small and very generally distributed eruption of psoriasis occur as it were in an acute manner after bathing in the sea, or after chilling of the surface, while we know that the chronic variety, with a tendency to large patches, comes on most unaccountably, and seldom can any local or special exciting cause be found. Psoriasis exhibits well marked and unmistakable evidences of a constitutional origin, although it may be difficult to trace it in every case, especially among the poor, and the sudden appearance of diffuse eruption following a definite cause, as severe sea bathing, but shows the intensity of the constitutional disturbance responding to general stimulation of the integument.

We shall give this man tar internally, combined with an alkali, in the following prescription, which has been of service in other cases; it is the "*liquor picis alkalinus*" which you have often seen prescribed here externally with such success. The formula is as follows: R. Picis liquidæ, 3 ij.; Potass. Causticæ, 3; Aquæ, 3 v. M. Dissolve the potassa in the water and add slowly to the tar, with friction in a mortar. Commence with fifteen drops and increase slowly to half a teaspoonful after meals in considerable water.

CASE II. *Untreated syphilis, late tubercular ulcerations.* The case of this German, aged 25, is interesting, as showing the course of syphilis when left to itself, such cases as this demonstrating clearly the untenability of anti-mercurialistic doctrines, for, you know, certain writers, happily few and obscure, have urged that the ulcerations observed in the subject of Syphilis are the result of the mercury and not of the disease. This man contracted a chancre in 1868, which was treated locally and disappeared, and he acknowledges no syphilitic history except sore throat, rheumatism and headache, and he has never received any internal treatment for these or other syphilitic symptoms.

Two years ago the present eruption began near the inner malleolus of the right leg, and has continued in increasing severity, in spite of various local applications, until now you see the entire left leg, except the upper quarter, is involved in a mass of ulcerating lesions, whose sickening odor at his first visit filled the room. This diseased surface is made up of masses of tubercular deposit, with cicatricial tissues between each of these foul ulcers with sharp livid edges and pultaceous base, representing separate syphilitic neoplasms. On the right side of the head and forehead, you see similar ulcerating mass and a number of cicatrices, entirely devoid of hair.

This man has been under treatment at one of the Homœopathic Public Institutions for some months, where the sores had been subjected to constant local treatment, but no internal remedies whatever have been employed: they have steadily gotten worse, until now he is indeed an object of pity.

The elements of diagnosis in the present case are, the large amount of ulcerative surface, its character and distribution. Seldom will one see such a leg as this apart from syphilis; varicose and eczematous ulcers of the leg are very rarely so extensive as this, their surface is not so riddled by ulceration, the base of the ulcers is more clean, with less of this necrotic tissue; moreover, the ulcerations and cicatrices of the scalp are evidently of the same character, and as it would be impossible for them to be eczema, from their appearance in this locality, those on the leg must also be of another origin. This combined picture, then, can be afforded by no other disease but syphilis; it is hardly possible to see how the true nature of this disease could have escaped recognition so long.

We gave him no local treatment, but allowed him to continue what he is now using, a carbolic ointment, in order to demonstrate how completely such ulcerative processes are under the control of the proper constitutional measures. One week ago he received our ordinary mixed treatment, containing 1-32 grain of bichloride of mercury, about eight grains of iodide of potassium, two grains of iron, a little tincture of nux vomica, and compound tincture of cinchona, in each dose, after meals, thrice daily, and those who remember his state then, will see the wonderful power of the treatment. The offensive odor has entirely departed, some of the diseased surfaces have taken on a healthy action. In such cases you can pretty confidently predict a perfect and quite speedy recovery.

CASE III. *Warts cured by arsenic internally.* This girl, of 11 years, exhibits now nothing of importance diagnostically, there being but a single ordinary wart on the inside of the third finger of the right hand. The case is interesting, however, because, when she first came here, June 2, she had ten of these deformities, a number being on the face; and these have all disappeared, except

this one, solely under the internal use of arsenic. Three weeks after her visit, it is recorded that several of the warts had disappeared.

CASE IV. *Scabies, difficult of recognition* I venture to say that very few, other than those specially practising dermatology, would recognize that this young man, aged 19, has scabies; and yet the evidences are so clear that there cannot be a shadow of a doubt in reference to the true nature of the disease. The unusual features in the case are, that no history can be gotten of contagion (for generally the disease can be traced), and that there is such a very slight development of the eruption on the parts commonly recognized as liable to be affected. If we look on the sides of and between the fingers we find almost no eruption, a few small papules presenting nothing characteristic; except here, between the thumb and forefinger of right hand, we find a distinct and well marked *cuniculus*, or *furrow*, and another not quite so clear. These minute, blackish, irregular, pretty sharply defined, curved lines are the one sure clinical sign of the disease, and the extraction of the acarus from them, and its demonstration beneath the microscope, would furnish evidence beyond doubt, even for the most skeptical. There are some papules and vesicles on the flexor surface of the wrists, but no distinct cuniculi or furrows can be seen here.

You heard me ask him almost immediately after inspecting the hands and the wrists, whether he had any eruption or any itching about the genitals, and here, upon the penis, we find the same small, scratched papules, and on the glans itself a cuniculus is plainly visible. I think that enough attention has not been called to the fact that in the male the penis or scrotum, or both, will very generally be affected in scabies. The constant touching these organs in answering the calls of nature, and the habit some have of handling the genitals when in bed, give abundant opportunities for the acari to pass thence from the hands, where we must believe they generally find their first lodgement. In the female it is very common to find the breasts thus affected in scabies, and some French writer has claimed that eczema of the breast in women who are neither nursing nor pregnant, is always dependent upon scabies, a rather too broad statement. These few papules, therefore, upon the sides of the fingers, between the right thumb and forefinger, and on the penis, are quite sufficient to characterize the disease of scabies, even if the cuniculi were absent, for I do not know that such a combined picture is furnished by any other disease of the skin. This, you will understand, is a very mild case of scabies; there are very few of the results of scratching, pustules, &c., though he says that the whole body itches much at times: the disease is comparatively recent, he having perceived it only two weeks. It will yield completely, I expect, to a thorough warm bath, with yellow soap, and then a patient friction with the

sulphur ointment of the U. S. Pharmacopœia for a few nights, leaving the ointment on. This fellow's skin is pretty hard, and there are no excoriations, or such a procedure would be much too harsh; for scabies in women and children, you will see me prescribe storax, two drahms to the ounce, with perhaps, a little sulphur, say a drachm or so.

CASE V. *Venous dilation in the skin.* It is rather difficult to locate the exact position in dermatological nosology, of the lesion on this woman's leg. It is evidently the same process as occurs in the ordinary varicose veins, indeed this latter condition is also found to a very marked degree on her legs; but here on the left, extending over a distance of about eight inches up from the internal malleolus, by three or four wide at its broadest part, we find an almost continuous varicosity of very small veins or capillaries, and these are seen to be very near the surface, and light pressure over the dark purplish-brown surface (which causes much pain) shows that moving blood is contained beneath a very thin covering. On the upper portion where the disease has seemed to be spreading, a sort of purpuric state has preceded this dilation, and we have up here simply a staining, as though a diapedesis had occurred, or a minute capillary rupture, for this coloration is not altered at all by pressure.

What I want to call particular attention to is the great comfort and benefit she has derived from painting the leg once or twice daily, two or three coats, with flexible collodion (Collodii $\frac{3}{4}$ i.; Olei Ricini, gtt. v. M.). The tenderness has now very largely disappeared and she can stand on the leg with ease; the tendency to increase seems also to be somewhat checked. She has been taking half a drachm of the fluid extract of ergot, three times a day, for some little time, but I have some doubt as to the amount of good effected thereby in this disease. Certain it is, however, that she has obtained great assistance from the use of the collodion, as suggested by my friend Dr. Engelsted of Copenhagen, when at the clinic a week ago.—*Archives of Dermatology*, Oct., 1876.

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EDITORIAL.

Bergman vs. Volker.

We publish elsewhere a communication from Dr. Charles C. F. Gay, in reference to our report of the trial of the case of Bergman vs. Volker. As nothing was further from our motive in publishing the report than a desire to misrepresent Dr. Gay in any manner, we are very happy to be able to give place in this issue to his rejoinder; we must, however, assume the right of correcting or modi-

fyng some of his statements. In regard to the alleged error on page 92, the manuscript, still in our possession, reads: "Dr. White's (measurement) varied from $2\frac{3}{4}$ of an inch to 2 inches," and Dr. White in his testimony, which we did not give in full, swore that his first measurement made $2\frac{3}{4}$ of an inch shortening; that his second was 2 inches. In reference to the word eczematous, it occurs at the opening of Dr. Gay's testimony on page 90, and not on 92. Its bearing on the question at issue we cannot see, we are, however, willing to call it "scales." If the "several" errors to which Dr. Gay alludes are of like importance, we are not surprised that he did not enumerate them. The first two lines on page 93 are exactly as they read in the reporter's manuscript before us, and if not the exact words carry out the idea which we heard Dr. Gay express on the stand at this very point in the course of his testimony. To prevent further error, Dr. Gay has in the present communication, corrected his own proof. In regard to the errors in the testimony of the other witnesses, we know of none except in our report of Dr. Rochester's. On page 98 the types make him say that shortening of from two to *three* and one-half inches was found. This error we were about to correct in another manner, at Dr. Rochester's request, but take this occasion to do so. It should read from two to *two* and one-half inches. In regard to our Editorial remarks, we are alone responsible for them; neither did we consult our imagination, nor call in the aid of spirits, either rectified, good, bad, or indifferent. We deny all dealing with such unstable confreres. The basis of our remarks upon Dr. Gay's "very grave charge" is this: In the *Sunday News* of Oct. 20th, may be found an interview had by one of the representatives of that paper with Dr. Gay, in the course of which he twice takes occasion to charge the experts appointed by the court, with having "combined" to break down his diagnosis. These gentlemen were appointed to inform the court of Bergman's condition, to have "combined" either to uphold or break down the diagnosis made by Dr. Gay, unless the facts sustained them, would have been committing perjury.

The very natural inference to be drawn from Dr. Gay's rather ill-advised remarks during the whole of this published interview is, that he considered the combination made to break him down, no matter what the facts of the case were. He denies to us the privilege (which we do not consider one) of doing exactly what he has done, and in the public prints. We do esteem it a privilege in putting on record his denial of an affront, at once, so grave and uncalled for.

In his recapitulation of the points of the case, we are sure Dr. Gay would not have his readers infer, as they might from his use of quotations, etc., that the patient continued under Dr. Miner's care from Dec. 11, '75, until Feb., '76, when another physician "commenced" treatment. Dr. Miner saw him but once, as our readers are aware from his testimony, and then as a consultant, on account of the dropsy.

We are very positive that he is mistaken in regard to the measurements made by Dr. White, and, we therefore again call his attention to the fact, which the

notes of the stenographer will corroborate, that Dr. White's measurements, as sworn to by himself, made the shortening from $2\frac{3}{4}$ to 2 inches, so that the differences between the first and Dr. Miner's last is $\frac{1}{2}$ instead of $1\frac{1}{2}$ inches. The statement made that Bergman was confined to his bed nine months, Dr. Gay will find to be incorrect by referring to the testimony. Some of the physicians under whose care he came, state distinctly that he could not lie down, so great was the "oedema." Dr. Miner's testimony, we are sure he is ready to stand by, but without consultation with him, we will simply say in explanation of Dr. Gay's remarks upon it, that what he said in reference to the union of intra-capsular fracture was in answer to the question. "does not this fracture sometimes unite by bone?" or a question of that import. The remark that it united in nearly its old position, was in reply to testimony already before the court, in which an attempt was made to show that to obtain two inches shortening, the head would have to be carried down upon the shaft two inches.

Following out the plan which we adopted at the commencement of this article, of taking up such points as we deemed demanding notice, in the order in which they occurred in the paper, we come to the last thing in the paper concerning which we care at this time to make any remarks. Dr. Gay objects to our assertion that he candidly said that he did not reduce the dislocation. After reading his denial of making any such candid statement we must confess that we were probably mistaken, for from this point, to the end of the article, we are at a loss to determine whether he thinks the head of the bone now in the acetabulum or in the ischiatic notch. We were inclined to think when we heard him swear that he thought the head of the bone in the ischiatic notch, that such a statement was a pretty candid avowal that it was not in the acetabulum, or in other words, that the dislocation was not *reduced*, but on reading his reply, we cannot find any definite and exact statement as to the position of the head of the bone. To say that he has "reduced" the head of a femur from the dorsum ilii into the ischiatic notch is to lay claim to a "reduction" with which we are not familiar, although tolerably informed in the literature of the subject. With such a use of the word "reduced" of course we were out of the way in our statement.

With the surgical questions involved, we have in this connection nothing to do, we would respectfully recommend their reference to a High "Joint" Commission. While we have our own opinion in regard to the matter, we do not care to enter into a discussion of the points, nor can we allow a further consideration of them, in a controversial manner, in these columns.

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Association of the Alumni and Officers of the Medical Department of the University of Buffalo.

The third annual meeting of this Association will be held at the College Building, on Commencement day, Tuesday, February 20th, and an interesting

re-union is anticipated. The committee of arrangements have not yet completed their programme, but we are permitted to state that at the meeting in the afternoon some interesting topics connected with medical practice, will be presented for discussion. In the evening at the conclusion of the commencement exercises Prof. F. H. Hamilton, of New York, will deliver the address to the Alumni. Arrangements are being made for a supper at the conclusion of the evening exercises.

The executive committee do not desire to exclude volunteer papers from the meeting, but request that their titles and probable length be sent to the Secretary, Dr. E. N. Brush, prior to the twentieth of February.

A new exchange, THE TOLEDO MEDICAL AND SURGICAL JOURNAL, Jonathan Priest, M. D., editor, is announced and will be welcomed to our list.—THE CLINIC (Cincinnati) will after January 1st, pass under the control of Dr. Roberts, Bartholow.—Among the awards at the Centennial Exhibition we notice that Messrs. Warner & Co., of Philadelphia, received the medal of award over all other competitors for sugar coated pills.

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Books Reviewed.

Transactions of the College of Physicians, of Philadelphia. Third Series, Vol. II. Philadelphia: Lindsay & Blakiston, 1876.

This volume contains the papers read before the College from October, 1875, to July, 1876, inclusive. The contents consist of thirteen papers and a memoir of Dr. George W. Norris and of Dr. John S. Parry. The papers are all of a high character and of great interest. Dr. James H. Hutchison reports a case of empyema which, after repeated use of the aspirator, was cured by the introduction of a drainage tube into the chest.

A paper by Dr. Ashhurst, on excision of the knees, is of much value and presents some very important points in this operation. He believes that while diseases of the joints are unquestionably local, that they are not of exclusive local origin, and that general treatment should be combined with the local. He uses a transverse in preference to a H or U incision. All the papers presented in this volume are of great practical value, and do credit to the high standing of the College.

The volume is presented in a style to correspond with the first of this series, and is finely printed and bound. One chromo-lithograph and several wood cuts are introduced.

Cyclopædia of the Practice of Medicine. Edited by DR. H. VON ZIEMSEN. Vol. IV. Diseases of the Respiratory Organs. New York, Wm. Wood & Co., 1876.

The fifth volume of this work, already noticed, (Vol. XV. p. 277.) is devoted to the same general subject as this, and Dr. Buck informs the readers of the work that additional matter upon diseases of the respiratory organs excluded from this volume for want of space, will be found at the end of Vol. VII. Article first of this volume upon diseases of the nose, naso-pharyngeal space, pharynx and larynx, is by Dr. Fraenkel. Preceding the description of the diseases of these localities, is an account of the methods of examination, the instruments employed and formulæ for treatment.

The article upon Croup and Diphtheria is by Dr. Steiner, the author of a work upon Children's diseases, which has been recently translated into English. He regards these two affection as one disease under dissimilar forms. The only difference, he says, consists in the fact that in croup the exudation takes place upon the free surface of the mucous membrane, while in diphtheria it occurs at the same time within the tissues. In pleuritis much attention is paid to operative treatment. The volume, taken in connection with volume five, forms a very valuable treatise upon diseases of the respiratory system. It is fully abreast with the times, and while there are some things in the line of treatment with which American physicians cannot coincide, there is nothing which can harm them to know.

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Books and Pamphlets Received.

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Chemistry: General, Medical and Pharmaceutical, Including the Chemistry of the U. S. Pharmacopœia. A Manual of the General Principles of the Science, and their applications in Medicine and Pharmacy. By John Attfield, Ph. D., F. C. S. Philadelphia: Henry C. Lea, 1876. Buffalo: T. Butler & Son.

The Use and Value of Arsenic in the Treatment of Skin Diseases. By L. Duncan Bulkley, A. M., M. D. New York: D. Appleton & Co., 1876.

Public Libraries in the United States: Their History, Condition and Management. Special Report. Department of the Interior, Washington, 1876.

The Operation for Stone as observed in some of the London Hospitals: Together with Report of Cases from Private Practice. By A. Van Derveer, M. D. Reprint from the Archives of Clinical Surgery, October, 1876.

B U F F A L O

Medical and Surgical Journal.

Vol. XVI. Dec'r, 1876, Jan'y, Feb'y and March, 1877. Nos. 5, 6, 7 & 8.

Original Communications.

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ART. I.—*Puerperal Convulsions. Cases, with Symptoms and Treatment.* By — FORDYCE, M. D.

[The following paper, read at the meeting of the Medical Association of Central New York, gave rise to considerable discussion, as to the propriety and safety of employing Veratrum Veride in Puerperal Convulsions. We present the paper, leaving our readers to form their own conclusions. Ed.]

I have selected this subject, not because of any claim that it is not well understood, or that any management of it can be presented which has not already some precedent, but because the subject is of the most intense interest to the medical man, as well as to their immediate friends, and of those who may be so afflicted.

The disease and the description of it is, and has been the same for centuries. Certain pathological conditions relating to it are believed to be better understood than formerly, but the visible manifestations are unchangeable.

Although I shall not refer to many authorities for what may be said on this occasion, I have the greatest reverence for the opinions of medical authors upon this subject—simply

adding the opinion of Dr. Hodge that "the pathology of puerperal convulsions has never been satisfactorily established to the professional mind." In the following part of the text, pp. 299 and 300, although a number of supposed causes are mentioned, and all, without exception, given as pre-existing to pregnancy, he deduces an argument against inducing or hastening delivery—using this language to the accoucher: "He should postpone, as far as practicable, the occurrence of labor, instead of hastening, prematurely, its advent."

And further on says: "Of course by the code of ethics, such women should not marry—should not become mothers."

To these statements and conclusions we shall take exceptions. Puerperal convulsions occur nearly as frequently in women who have had one or more healthy children, as in primipara when certain conditions are present which occasionally attend gestation.

Albuminuria is the principal and the only pathological condition that for any length of time precedes convulsions. Some escape who have this, but we are *always* apprehensive until we know case safely over. Now, the same condition that produces the convulsions in Albuminuria is also sometimes developed during the progress of protracted labor by mechanical pressure of the end of the uterus upon the bladder, and ureters damming the urine upon the kidneys, also perhaps by pressure upon the kidneys the secretion of urine is suspended, and urea is retained in excess in the blood, producing uremic poisoning and convulsions in part of this class of cases; indeed, a sufficient number to account for all the cases of puerperal convulsions.

I apprehend, of course, that this view of the cause of the disease may be objected to, but having made this a subject of investigation, and having attended a large number of cases, I am fully confirmed in my opinion that uremia is the cause of puerperal convulsions. The proof is stronger, also, if we take into consideration the prodroma that usually precede convulsions in pregnancy. We are consulted for sudden sharp pains in the head, confusion of intellect, generally attended with œdema of extremities, scanty secretion and voiding of urine, and that of dark color with general restlessness, and sometimes coma vigil, urine containing

albumen, very little, if any, urine giving, in short, nearly all the symptoms of Bright's disease. Now, if we have an opportunity of treating this class of cases prior to the development of convulsions, no disease of pregnancy is more tractable to the use of remedies. I think we may safely estimate that not over fifty of this class will have convulsions, and without treatment not one is safe. Of the remedies, a carefully selected position in lying, and in every way avoiding pressure on the ureters and kidneys by tight clothing, seem to me most important. Then giving some mild saline laxative frequently, as Rochelle salts or Cream of Tartar, continued until the kidneys are able to resume their functions. If circulation is hurried, control it with Verat Viride so as to reduce frequency of pulse to sixty per minute. Then follow with Digitalis in small repeated doses, and the physician will have few cases of convulsions to treat.

But, unfortunately, from the modesty of ladies in gestation we are not permitted to see or prescribe for them until we are suddenly called to attend them for a convulsion. The character of this kind of convulsion is too well known to require minute description, but to more fully illustrate my plan of treatment, I will give a few cases with symptoms and treatment.

CASE I. Mrs. C., æt 20, native, light complexion and hair, slender build and a very delicate lady, blue eyes. Was taken ill on twenty-seventh of May, 1874, at $7\frac{1}{2}$ months, Dr. Pany was called to attend her; on the twentieth she had convulsions, and a Homeopathic physician was called in with the Dr.; I was absent from the place at the time, on my return was called in the afternoon of twenty-eighth, found the lady comatose, and at this time had had nine convulsions; face and extremities œdematous; blood oozing from mouth from injury to tongue; breathing stertorous; chloroform had been administered prior to my visit, but as soon as effects ceased another frightful convulsion had followed; pulse 120; patient insensible, but could swallow small quantities of liquids; advised Verat Viride, ten drops; repeat in thirty minutes in reduced doses until vomiting ensued or pulse was reduced to sixty; convulsions controlled with second dose, and third dose reduced pulse to forty-eight; continue Verat as soon as pulse in-

creases above sixty; on the twenty-ninth, towards night, she became conscious, and by the use of Rochelle salts and Cream of Tartar and Acet. Pot. œdema disappeared; she became quite comfortable, and on the twenty-first of June, twenty-three days after attack was delivered of a still-born child in a stage of great decomposition, without convulsions or any unfavorable symptoms, so far as mother was concerned. This lady's health became good afterwards, and she became pregnant again, and on the twenty-eighth of August, 1876, gave birth to a fine healthy little girl. Prior to confinement, three or four weeks, slight œdema made appearance, and albumen in urine. On use of Cream of Tartar and Rochelle salts it all disappeared before confinement, and by using a few drops of Verat Viride whenever pulse was quick, she had no further symptoms of convulsions. Is now well.

CASE II. Miss H.; Irish girl, æt 18; thick set, fleshy; conception illegitimate, and every effort made on her part for concealment; was taken, as near as I can learn, in night of Oct. 17th, 1875; found by parents in the morning insensible and having a convulsion every fifteen or twenty minutes; Dr. Cummings, of Cayuga, was called to see her in the morning of eighteenth of Oct., and found her in this condition, insensible with no evidence of labor having commenced; he saw her have a good many severe convulsions; tongue bitten through and blood running from the mouth; the Dr. gave chloroform and succeeded in controlling the severity of the convulsions; he sent for me to assist him in the case; on consultation we were satisfied nothing could save the girl's life except prompt delivery, although the mouth of the uterus was not dilated larger than the point of the finger; we gave her chloroform so as to produce complete anesthesia, and proceeded to forcibly dilate the womb and turned and delivered a very large full grown dead child; followed delivery with Verat Vir.; had no more convulsions, and in a week the girl was out of doors as well as usual, except sore tongue. This case had been preceded by scanty secretion of urine, and we were obliged to use catheter next day, only once however. Sensibility restored second day after delivery.

CASE III. Mrs. C.; American lady; light complexion and thirty years of age; had one healthy living child some six years old; was a woman of good health generally; about seventh month of gestation began to have scanty secretion of urine and feet somewhat swollen; consulted me in regard to her condition; gave her diuretics and laxatives with relief; about eighth month, she having discontinued these remedies, feeling that the trouble of taking was more than she was willing to submit to, the same symptoms reappeared with confusion of intellect and sudden sharp pains in the head and eyes; I then insisted on her taking the remedies and admonished her husband of my fears of convulsions if she neglected them; she improved again and appeared quite well, but again discontinued remedies about a week before her confinement, which took place May 18th, 1875; was taken with labor pains, as usual, in night before, and also with pains in the head soon after; from this time she did not remember anything that occurred; at 6 P. M. she began to have convulsions while I was absent; on my return found her in a frightful convulsion; controlled them partially with chloroform, and as soon as uterus was dilatable, turned and delivered her of a healthy, living child; she had no more convulsions; kept her under Verat Vir until pulse was fully controlled; she made a good recovery.

CASE IV. Mrs. H., of Leadyan; American, of English parents; light complexion, thick set young lady of 20 years; first child; feet had been bloated and urine scanty some four weeks before confinement; no remedies had preceded labor, which had commenced in the evening of October 8th, 1876; I was at Philadelphia at the time, and a Homeopathic physician of some 35 years practice was called; the treatment was purely homeopathic; at about 2 o'clock, morning of the 7th, convulsions commenced and continued every twenty minutes until she had twenty-two; consciousness lost with the first; I was expected to return on morning train at 10 o'clock; on arrival met a messenger as I was stepping off the cars, who had been waiting an hour for train; I learned the particulars and at between 11 and 12 o'clock saw the patient; there was not the first evidence of natural sensibility about her; the same stertorous breathing that attends last stages of apo-

plexy; tongue bitten through in various places, bloody froth eozing from the mouth.

The old doctor was glad to see me for once in his life; he informed me that he had given all his usual specifics for convulsions without the least appreciable effect; he "feared the potincus were not high enough;" he had only the 200th attenuation, if he had only the 4,000th attenuation, he knew he "could have knocked the convulsions higher than a kite." Upon examination I found head presentation and Os-uteri partly dilated, and proceeded at once to deliver with forceps of a very feeble, living child; gave chloroform; the mother continued insensible after delivery; she made no more effort to swallow than a dead person, when liquids were put into her mouth; it was two hours or more before I could get any medicine into the system to influence the convulsions in any manner; she had two convulsions before could get a drop of anything down: then succeeded in getting ten drops Verat Vir swallowed; in thirty minutes gave another dose: after the second dose convulsions ceased; she remained unconscious for forty-six hours, when upon hearing the child cry she roused up and asked "what is that?" From this time she became gradually conscious until she was fully restored; the urine in this case was very scanty and removed with catheter twice after delivery: contained albumen and no urea; by using Acet. Potash, the normal quantity and quality of the secretion was restored in two days more; the bloating disappeared and secretion of milk came on so that the child received full nourishment from the mother: recovery good.

These cases are cited to illustrate the effects of the Verat Viride upon convulsions of this character. I have not used it in uremic convulsions from Bright's disease, but I have no doubt of its value in them. It is of great service in convulsions after Scarlet Fever with dropsical sequela, which, no doubt depend upon the same cause. Cazaux and Simpson mention the diseases in the same light.

ART. II.—*Abstract of the Proceedings of the Buffalo Medical Association, January 2d, 1877.*

Members present--the President, Dr. Wyckoff, in the chair, Drs. Rochester, Miner, White, Samo, S. S. Greene, Bartlett, Brecht, Howe, Brush, W. W. Miner, Fowler and Dorr.

The essayist for the evening, Dr. Barnes, was absent, and no paper was presented.

DR. ROCHESTER reported the case of a young man aged 25, weight last fall 98 pounds, who recently died suddenly of heart disease. He had been a patient of his for seven or eight years, having had during that time several attacks of rheumatism. He had also had pleuritis and subsequently pneumonia.

A *post mortem* examination was made, which revealed the pericardium wholly adherent to the heart and considerably thickened. The adhesion was so strong that in some places it could only be separated with great difficulty. The heart was removed and found to weigh twenty-nine ounces. It was estimated that at the time of death the patient could not have weighed more than from one hundred and seven to one hundred and ten pounds.

The mitral valve was the seat of ossific deposit, and there was also a slight lesion of the aortic valve. He never knew that the patient had pericarditis, but from the fact that pleuritis had been present and that the pleura was adherent to the pericardium he presumed the inflammation had extended from one membrane to the other.

DR. WHITE said that he was present at the *post mortem* referred to, and to him the condition was an interesting revelation. He would like Dr. Rochester to explain the cause of death.

DR. ROCHESTER replied that in hypertrophy of the heart death was often sudden and inexplicable. He had in his cabinet a heart which weighed, when removed, sixty ounces, and at the *post mortem* which included an examination of all the organs, no satisfactory cause of death could be found. (Here followed some general conversation in regard to heart disease which the Secretary was unable to take down.)

DR. S. S. GREENE reported a case of retention of urine caused by a calculus being lodged in the urethra, which he could only

extract by resorting to the urethrotomy. He was doubtful as to the origin of the stone, whether in the bladder or in the urethra, if in the former its size would show that considerable distension had taken place in the neck of the bladder to allow its passage.

DR. MINER said he had a case now under observation in which, in the course of a year, an ounce of small calculi would be voided from the bladder with the urine, sometimes demanding assistance in their passage, but generally passing without difficulty.

DR. HOWE presented the history in brief of a case of retinal glioma. He exhibited the eye after removal, and also two casts of the patient's face, one at the time of operation, the other subsequent to death. The patient was a little girl who presented the disease in an advanced stage, the operation was made with an idea of relieving pain and prolonging life. One month after the operation the patient died.

DR. MINER said that the matter of recurrence in these cases was one which was to be taken into consideration. The case reported by Dr. Howe was one in which it was exceedingly proper to operate, but generally these cases proved fatal by a recurrence of the disease. This was, unfortunately, the case also in malignant diseases situated in other localities, the breast, the vulva, and the uterus, in many cases the disease returned in the original locality or in some other, and proceeded to a fatal termination.

DR. HOWE said that in regard to the eye he thought there were two reasons why the operation was advisable: 1st. Relief from pain. In the case reported, and in others of a similar nature, the origin of the disease was in the retina, and as it progressed the unyielding nature of the sclerotic coat, which would not give way as readily as some other tissues, gave rise to intense pain. 2d. In some cases the patient recovered. He presented nearly a year ago, a patient to the society with retinal glioma, which had to be subsequently removed, and up to date there had been no signs of return.

DR. WHITE said that so important a topic could not be discussed intelligently on short notice. He thought Dr. Miner too skeptical, that the breast could be removed for cancer, or the neck of the uterus amputated, and prolong the life of the patient for

many years. Without prolonging the discussion, he thought it a very proper subject for special discussion at some subsequent meeting. He desired to report a case which afforded the topic for some considerations in reference to the treatment of ovarian cysts of small size, when situated in the cul de sac of Douglas. Not long since he was called to treat a patient in an eastern county of this state. Without entering into her history, he would simply state that she complained of pressure on the rectum, a sense of fullness in the pelvis. The uterus was carried up and forward, the bladder somewhat pressed upon. A cyst was plainly made out, and its contents evacuated through the vagina. The fluid removed was semi-gelatinous and coagulated at once on the application of heat. The tumor was found to be multilocular. The cysts were evacuated and injected with tincture of iodine. The result he was not prepared to announce. He had been informed that a slight peritonitis had followed, but nothing alarming. He had had, in his own practice and in consultation, perhaps half a dozen similar cases, and had treated them in various ways by removal through the vagina and by injection. He had removed but one by sections, through the vagina, the pedicle was separated by the ecraseur. He brought up the subject to get the opinion of the members as to the best method of dealing with similar cases.

DR. MINER said that in the *Boston Med. Journal* of Nov. 2d, was the report of a case by Dr. Clifton Wing, in which Dr. Warren had removed the tumor through the vagina by enucleation.

DR. ROCHESTER said that two cases had come under his observation. The first was that of a laboring woman, who complained of a pain on defecation, a sense of fullness in the pelvis, etc. Under the idea that it might be an hæmatocele, he introduced a trocar and drew off the contents, injecting two or three ounces of glycerine with carbolic acid, four grains to the ounce. A complete cure was the result. In the second case the tumor was simply tapped, but the patient was lost sight of.

DR. MINER said that while talking on this subject, he wished to report two cases of ovarian tumor. One, a lady in Canada, has at intervals a discharge of the contents of an ovarian cyst through

the rectum. The tumor subsequently filling up and again discharging. The other was a lady that came down to him from Cattaraugus County, with a fistula in the side, through which the contents of an ovarian cyst had spontaneously discharged. He introduced an elastic catheter through the opening and washed out the cavity with water containing a trace of carbolic acid. This was done daily for some time until a cure resulted. The discharge ceased, the opening closed and the tumor has not since appeared. Its size was such that at the first visit she made him, on enlarging the opening and introducing a tube, a large wooden pailful of fluid was removed.

DR. BRUSH reported a case of Syphilitic Disease of the Brain under his care at the Hospital of the Sisters of Charity, which was convalescent under large doses of Iodide of Potassium.

DR. SAMO reported a case of a child, probably syphilitic, in which epileptiform convulsions yielded to Iodide of Potassium.

DRS. S. S. GREEN and BARTLETT also reported cases illustrative of the value of Potassium Iodide in similar cases, and sometimes in establishing a diagnosis.

On motion, the Association adjourned.

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MISCELLANEOUS.

Croup and Diphtheria.

SIR:—Together with many others of the medical public I have listened with great interest to your discussion at the Academy, still to be continued, on the relations between diphtheria and croup. I have been struck by the fact that, among all the opinions hitherto expressed, has not yet been presented the one held by so many European investigators: namely, that the croup that occurs in the course of diphtheria, is not a diphtheritic process, but an ordinary inflammatory process, *consequent* upon the local and constitutional conditions of the disease.*

* See Birsch Hirschfeld: Archiv der Heilkunde, 1873; Eberth: Ueber Diphtheria; Letzrich: Archiv Virch. Bd. 33; Klebs: Ueber Diphtheritis; Senator: Ueber Synanche contagiosa; Volkmann Sammlung, No. 73, 1874; Wagner: Arch. der Heilkunde, 1886. Bd. 7; Buhl Zeitschrift für Biol., III., 1868; Rindfleisch: Path. Anat.; Waidenburg: Berlin, klin. Wochensh., 1872.

When croup has been produced artificially in the larynx, by means of diphtheritic membranes introduced into the air-passages, the *appearance* of the croupal membrane has been identical with that of membranes formed after the introduction of chemical irritants, as ammonia.* Only in the latter case the false membranes were not contagious; in the former they proved to be so, by infecting the animals upon whom they were transported. All writers who rest the peculiarity of the diphtheritic exudations upon the presence in it of a special kind of bacteria (*Micrococcus diphtheriticus*, Klebs; *Zygodesmus fuscus*, Letzerich), admit that this parasite is never found in the larynx below the vocal cords. Senator, who denies the existence of special diphtheric bacteria, is nevertheless among those who admit a radical difference between the "fibrinous exudation in larynx and trachea," seated upon an intensely hyperæmiated mucous membrane, and the exudation in the pharynx, composed of a network of degenerated epithelium, fine granules, and micrococci, which, as the disease progresses and *inflammation is set up*, becomes a true eschar, covering an ulcerated mucous membrane, and containing detritus of its surface, together with pus cells and blood-corpuscles. "The characteristic lesion of diphtheria is an acute necrosis." "On the contrary, the croup membrane of larynx and trachea, is an exudation in the narrowest sense, consisting of fibrine and blood corpuscles,"† or, as Wagner describes it: "The so-called croup membrane consists of a thick network of delicate fibres, and of extremely numerous elements, similar to pus-corpuscles, lying in its meshes. . . . It develops by degeneration of the cylinder epithelium of the lower larynx and trachea, in the same way as the diphtheritic membrane from degeneration of the pavement epithelium of the pharynx. . . . Between the croup exudation and the surface of the mucous membrane, is a thin layer of muco-purulent fluid, and underneath, the tissues are hyperæmiated, and the seat of a moderate infiltration of pus-corpuscles and free nuclei, almost confined to the superficial layer. . . . But underneath the diphtheritic exudation, the infiltration is intense, and extends to the submucosa"‡

According to Buhl, this infiltration is the most characteristic circumstance in the local process of diphtheria, and which most distinctly defines it as a "general infectious disease." The author compares the infiltration with that observed in the primitive lesions of syphilis and of tuberculosis. Croup, on the other hand, is a local inflammation—an intensification of a catarrh, *secondary* to diphtheria in most cases, even when occurring in the course of that disease. The mucous membrane is superficially infiltrated, but with pus-corpuscles, and not with elements, which, Buhl main-

*Oertel: Deutsch. Archiv für klin. Med., 1871.

†Senator, loc. cit., also Buhl, loc. cit., p. 352: "After removal of the exudation there remains an ulcer with sharply jagged edges. . . . The essential part of the process is in the mucous membrane below the epithelium."

‡Loc. cit. pp. 490-495, 496.

tains, are in diphtheria derived from conjunctive tissue cells, and tend to organize.* This doctrine corresponds to, although it be not quite identical with, the well-known distinction established by Virchow between "diphtheritic" and "croupal" inflammation.† It is much ridiculed by Sanné, author of a recent excellent systematic treatise on diphtheria.‡ "By a deplorable abuse of language," observes the French writer, "applying to pathological processes the terms which served to designate diseases, writers on the other side of the Rhine have, after the example of Virchow, called *croupal inflammation*, a phlegmasia which, without involving the structure of the mucous membrane, deposits on its surface an exudation—a false membrane; and *diphtheritic inflammation*, an interstitial phlegmasia characterized by a sero-fibrinous exudation, which infiltrates tissues and causes their mortification. . . . Thus they have created the whimsical denominations, *croupal pneumonia*, *croupal nephritis*, on the pretext that in these cases the fibrinous exudation is effected into the pulmonary vesicles or the renal tubuli."§

Sanné considers equally *bizarre* the views of Wagner, who, "arranging pathology to suit his anatomical conceptions, maintains that a patient may have at the same time, by simple coincidence, two different diseases: diphtheria in the pharynx and supra-glottidean part of the larynx, and croup in the infra-glottidean part, and in the trachea."|| "The only true view is to consider diphtheria as always the same process, susceptible of assuming distinct anatomical forms according to the organ on which it is localized."

Here the author makes the very confusion between the disease and the anatomical conditions which he has so emphatically condemned. The distinction is of importance precisely in relation to the question now under discussion at the Academy, namely, the identity or non-identity of sporadic croup, and of croup occurring in the course of diphtheria. The assertion of identity can mean nothing, except as regards etiology and contagion. The laryngeal lesions are identical as proved by the examination of both clinical and experimental cases. I have recently had an opportunity to examine the larynx and trachea in a considerable number of cases of diphtheric croup, and to compare them with a few of intense catarrhal laryngitis. In the former cases existed all the lesions of the latter, namely, fall of the epithelium, induration of the mucous membrane, by greater or less number of small round cells, great dilatation of blood-vessels, and frequent ecchymoses. The additional lesion in the croup was, of course, the false membrane, lying now upon parts where the epithelium was still intact, now where the mucous membrane had become denuded. The differences of

* Loc. cit. p. 87. Organizing in the mass of nerves; this same infiltration determines the diphtheric paralysis.

† Anst. Trans. 1846, Bd. 1.

‡ Traité de la diphthérie, 1877.

§ Loc. cit. p. 34.

|| P. 44.

opinion which concern the false membrane in the pharynx do not exist for the larynx; every one admits that it is a fibrinous exudation, whose organization into adhesions, similar to those of pleuritis and peritonitis, is only prevented by the rapid termination of the disease. "Fibrinous inflammations in general represent a more elevated degree of irritation than serous phlegmasiæ." "The blood is doubtless the principal source of the exudation, but it is not probable that this product of inflammation pre-exists in the blood. . . . We must admit that the inflamed tissues have the property of so modifying the serosity coming from the vessels, that this is changed into concrescible plasma or fibrine. This fibrinogen property would be due, according to Chalmers, to the process of denutrition which succeeds to the stage of cellular irritation, that is to say, to the materials accumulated during the *decadence* of inflamed conjunctive tissues."*

Let it be admitted that tissues, from excessive hyperæmia when the blood in the diluted vessels has been altered by diphtheritic poison would afford material possessed of more intensely irritative properties than those affected by the hyperæmia of ordinary catarrh. We should then approximatively understand the frequency of croup in diphtheria, as compared to its occurrence in non-specific pharyngitis, where the local conditions of irritation may be very much the same. But there is nothing to exclude the possibility of other causes concurring to produce the same result, namely, the communication of a fibrinogen property to the hyperæmiated epithelium or conjunctive tissues of the laryngeal mucous membrane. The question is, therefore, not Is croup diphtheria? but, admitting that diphtheria may be a cause of croup, Cannot croup be caused by something else as well?—as Oertel produced false membranes in the larynx and trachea of rabbits, by introducing on the one hand false membranes from diphtheritic patients—on the other, non-specific chemical irritants.

The distinguishing test has frequently been sought for—clinically, as in Oertel's experiments—in the capacity of these false membranes to infect other animals. I do not think that this experiment has ever been made with the false membranes derived from a case of "idiopathic" croup, although the contagiousness of this latter disease has of course been alleged as indisputable proof of its diphtheritic etiology. In the same way, the development of scarlatina in a family, immediately after a case of nephritis, awakens suspicion of the scarlatinous origin for the latter, in which a characteristic angina had been overlooked. But no one on that account would presume that nephritis could never be anything else than a symptom of scarlatina. The relations between diphtheria and croup may be aptly compared to those between

* Lancereaux, *Anatomie Pathologique*, p. 237, 1875. According to Buhl, the proliferating epithelium form within themselves a substance similar to fibrine, and throw it off together with the pus-corpuscles.

scarlatina and nephritis. In each case exists a specific constitutional disease with lesions characteristic or even peculiar to itself, and in each case, also, these specific lesions may be accompanied by a varying cortège of non-specific lesions, which latter may be encountered in various other groups of morbid phenomena. In each case, finally, the anatomical products of these non-specific lesions may serve to transmit the specific disease, simply because all the particles thrown off from a living body at any given time tend to reproduce themselves in their entirety, consequently with the poison with which they have become impregnated while part of that body, as soon as they can find an appropriate soil for development. Living particles from healthy bodies only tend to grow, to excite excessive local growth; hence production of pus, when they can gain admittance below the epithelium of other living bodies.* Similar particles thrown off from diseased organisms, though from parts not exhibiting the specific lesions of the disease, must similarly tend—proportionately to the degree of constitutional infection—to reproduce themselves, and with themselves the poison. Hence the inoculability of croupous membranes from an individual affected with diphtheria would still not prove that these were in any sense diphtheritic—still less, therefore, that false membranes in the larynx or trachea must be proof of diphtheritic poisons.

The above remarks apply especially to the croup of children, in whom, from the smallness of the throat, the larynx lies much nearer to the seat of irritation set up by pharyngeal diphtheria, and inflammations from contiguity and inflammatory œdema are therefore facilitated. In the much rarer cases of croup complications, in the diphtheria of adults, it is admitted that a true *extension* of the original diphtheritic process will much oftener be found. In the single case we have had an opportunity of examining (only microscopically), the epiglottis and entire larynx were ulcerated and covered with pultaceous exudations, entirely resembling those of the pharynx. Wagner, especially, gives a special description of laryngeal diphtheria in *adults*. Besides the theoretical interest of this question, is a practical inference from the theory of croup as an inflammation induced by intense irritation of adjacent parts: we should be cautioned against irritating therapeutics, which may serve to precipitate the very lesion they propose to heroically avert.—*New York Record*. M. P. JACOBI.

110 West 34th street.

* Essentially the theory of Beale, which seems to us much more comprehensive than that of specific bacteria.

Compulsory Medication of Prostitutes by the State.

Of the registered women in Paris, those living in the *maisons tolérées* are examined once a week, while those who live in private apartments are examined only twice a month. "But," says Dr. Mireur, who expresses the opinion of many eminent French physicians, "in the eyes of the majority of hygienists and syphilographers, such examinations as those which public women actually undergo are incapable of affording all the guarantees which we are entitled to expect from a similar measure. In fact, while these women are examined twice a month, or even once a week, if contagious sores are developed a short time after an examination, such women may transmit their poison to a great number of men before the next examination proving them to be diseased results in their being sent to hospital for treatment. M. Ricord thinks that prostitutes ought to be examined at least every third day; M. Ratier and M. Sandouville, every fourth day; M. Davilla, M. Langlebert, and many others, twice a week; M. Lancereaux, *every day*."

While of opinion that, in respect to public women *free from syphilitic infection*, two examinations a week ought to be, not absolutely, but within the limits of reasonable precaution, a guarantee against disease, M. Langlebert asks, "But would they be so in respect to women affected with syphilitic diathesis?" and he replies, "Certainly not; and here it behoves us to say with M. Alfred Fournier, that 'the knowledge of the contagious character of secondary syphilis opens a new era in prophylaxy, and exacts more extensive guarantees.'" M. Langlebert goes on to say that a woman leaving the hospital after having been treated for syphilis ought to be subject to a *special supervision*, involving an introspective examination every day during a period of eighteen months or two years after she is discharged from the hospital—that is to say, during the ordinary time within which, as sequences of the primary disease, symptoms of secondary syphilis are produced or renewed(?). By way of comment on the proposal here described, Dr. Mireus observes—"Until a new prophylactic system possessing real efficacy shall be adopted, the reform advocated by M. Langlebert is indispensable; and so long as it is not put into execution, we do not hesitate to affirm that registered prostitution, as well as clandestine, will continue a perpetual source of contamination." An examination every day—especially if during a period of two years—is indeed, as M. Langlebert admits, "*beaucoup*," or a good deal to ask; "but," he adds, philosophically, "he who would achieve the end must assent to the means."

Now, when it is considered how large is the proportion of registered prostitutes who during some period or periods of their career are infected with syphilis, it will be possible to form an

approximate estimate of the number of policemen and surgeons requisite to constitute the vast force which would be necessary to accomplish the examinations with that frequency and on that extensive scale which the leading French hygienists insist on as indispensable in order to prevent registered women from being, as they are authoritatively affirmed to be now, "a perpetual source of contamination."

Dr. Armand Depres, Professor of the Faculty of Medicine of Paris, and many years surgeon to Lourcine Hospital in that city, condemns the system of compulsory medication of prostitutes now practiced in Paris as "illusory," and one of his reasons for condemning it he states as follows: "Because a woman can be registered without its being discovered that she has had the syphilis (for example, an invalid, scarcely out of my hands cured, and yet in whom the disease may reappear, and be transmitted, is at once and easily registered)." Referring to the system generally he says, "It is well that it should be stated that our system, with the Dispensary of the Prefecture of Police and the Prison of St. Lazare, achieves, by the way of remedy to this evil, *nothing or almost nothing*. . . . Unless all women who practice prostitution clandestinely can be superintended, how is it possible to arrest the propagation of syphilis."—*Compulsory Medication of Prostitutes by the State*.

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Macro-Microscopical Sections of the Brain.

The brain, after removal of all enveloping tissues and vessels, is placed in common alcohol, where it remains about ten days, when absolute alcohol is substituted, to which tincture of iodine is added until the liquid is of the color of Maderia wine. It remains in this solution, which is frequently changed, also about ten days, when it is transferred to a saturated solution of bichromate of potash.

A human brain requires about two years before it is properly hardened, though the medulla, pons with the ganglia attached, and the brain of dogs, monkeys, and the fetal brain may be hardened in three or four months.

To embed the brain in the cylinder of the microtome, it is to be dried and set in the desired position in a warm, flowing mass of stearine, fifteen parts, lard twelve parts, and white wax one part, melted together. On cooling, it is liable to shrink, and it is well to pour into the space thus contracted a solution of crude turpentine and wax melted together. The basin surrounding the cylinder is filled with water, and the sections are then cut under water.

The cut section is placed in water and allowed to remain some hours; it is then removed to a solution of carmine quite free from the odor of ammonia, and after twelve hours it is transferred to water slightly acidulated with acetic acid. After remaining over night in this liquid, it is transferred to common alcohol and then to absolute alcohol, remaining about an hour in each. It is then removed to the glass, and, when the alcohol is evaporated, it is pencilled over with oil of cloves. When this is carefully done, so that there shall be no superfluous oil, Dammar lac is then poured over, and the upper glass adjusted. This should remain level one or two days, then, after removing the old superfluous Damar lac from the edges, a thin layer of melted wax is laid with a brush over the edges, and when cool, over this again, a preparation of asphalt and ether. Dr. Denny added that in his specimens, after the above preparation, he applied also a solution of caoutchouc in chloroform over the edges, and then covered both edges and sides with white wax. Oil of turpentine exposed to the air until it becomes thick may be used to render the specimen transparent instead of cloves.—*Dr. Denny, in Boston Med. and Surg. Journal.*

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Excision of the Rectum for Carcinoma.

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Dr. R. J. LEVIs Penn Hospital, Philadelphia.
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The patient, upon whom this formidable operation was performed, was a man sixty years of age, who had had symptoms of rectal trouble for about one year. Digital examination showed that there was a nodulated mass occupying the anterior part of the rectal wall, and extending a short distance to the sides. The finger could easily be hooked over the top of the tumor, which, therefore, extended about two and a-half inches up the bowel. After the bowels had been evacuated by laxatives and an enema, the operation was done as follows: After a large bougie had been introduced into the bladder to serve as a guide to the position of, and also to steady the urethra, an incision was made from the base of the scrotum to the coccyx, encircling both sides of the anal aperture. The hand of the operator was then introduced behind the rectum, into the hollow of the sacrum, by which means the bowel was torn loose from its posterior attachments. After this was done, Dr. Lewis, by means of his finger and the serrated scissors, broke down the attachment of the viscus around to the front. The cancerous portion was then carefully dissected from the prostrate gland and lower part of the bladder, exposing these structures perfectly to

view. During these procedures, the vessels were promptly ligated as soon as divided, and double sutures passed through the skin into the rectum above the proposed line of excision. These were not fastened, but left in position in order to give perfect control of the parts.

When the diseased portion had been thoroughly isolated, the gut was drawn forcibly downward by seizing the tumor, and the scissors used to cut through the walls of the bowel. About two and a-half inches were thus excised, leaving behind a perfectly soft and smooth mucous surface. The sutures were then shotted, and a few extra ones applied to keep the gut in position, which was, by this means, securely stitched to the surrounding integument. The parts are washed and dressed with carbolized solutions, and, at present, the patient is doing exceedingly well.

This case reminds me of a case of colotomy done in this hospital a few weeks ago, by Dr. T. G. Morton. The woman, when admitted, had such a tight cancerous stricture, that defecation had been impossible for some time. Colotomy was determined upon, and the colon was opened in the left lumbar region. A most curious complication was the finding of a large cyst, probably renal, lying exactly where the colon was expected, and producing a good deal of displacement of parts, which rendered the operation a very difficult one. The patient, who was a very poor subject, died about two days after the operation.—*Archives Clinical of Surgery.*

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BOGUS DIPLOMAS.—The following correspondence will explain itself:

[Copy.]

CAMP STAMBAUGH, WYOMING TER., Feb. 7, 1877.

Surgeon-General U. S. Army, Washington, D. C.:

SIR:—I have the honor to enclose herewith, for the information of the Surgeon-General U. S. A., a communication received by me on the 6th inst.

Very respectfully your obedient servant,

[Signed]

CHARLES H. DODGE,
Hospital Steward U. S. A.

[Copy.]

BUFFALO, N. Y., January, 1877.

SIR:—Do you want a medical diploma? Some hospital stewards have obtained diplomas through our agency, and are practising successfully. Many are well qualified, but lack diplomas. The agent, having been a hospital steward during the late war, knows whereof he writes. Fully one-fourth of the physicians in the United States have procured their diplomas through our influence.

Through the private agent of a medical college which cannot be questioned, you are proffered a diploma for the consideration of fifty (\$50.00) dollars. *No security is given, but the diploma will positively be forwarded by registered mail.* Send money by registered, or ordinary letter, *at the agent's risk.* A limited number only will be disposed of. If you cannot invest, please hand this to one who may.

An early reply is particularly requested.

Yours truly,

JOSEPH P. DONNER.

Address 580 Louisiana street, Buffalo, N. Y.

[We have received several copies of the above advertisement, forwarded to us by hospital stewards stationed in every section of the country. There is no doubt that the agent is making strenuous efforts to extend his business. Cannot some of our friends in Buffalo look after him?—Ed.] *Med. Record.*

We have also heard of this diploma dealer. Hospital stewards who are willing to receive diplomas in that way better by all means send him fifty dollars. When they get the diploma we wish they would send us word, or a copy.

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THE FIRST TELEGRAPH.—It is a curious fact (as the *Scientific American* points out) that the earliest system of telegraphy for signaling over long distances originated among the African negroes. It is still more remarkable that the means used were telephonic, and the signals were read by sound, and not by the eye, as in the case of the semaphore or other early signaling devices. The “elliembic,” as the instrument used is termed, is still in existence, and has been in use from time immemorial in the Camerous country, on the west coast of Africa. By the sounds produced on striking it, the natives carry on conversation with great rapidity and at several miles distance. The noises are made to produce a perfect and distinct language, as intelligible to the operator as that uttered by the human voice.—*Journal of Chemistry.*

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A NEW POISON.—The *Medical Press* and *Circular* says the Garden of Acclimatization of Paris has received several specimens of one of the most interesting of the flora of Rio Nunez—the Teli. The tree is an almost unknown species, and produces one of the most violent of existing poisons, which has recently been tried with success in several cases of tetanus. The Teli grows from sixty to eighty feet high. Its wood is very hard and close, and is much sought after for the building of boats, in consequence of its resist-

ance to decay. Its bark affords a violent poison. In important lawsuits among the aborigines of the country, and when the proof of the case by evidence fails, teli is administered as an infusion, as an "ordeal" to both the parties to the cause. He who survives is declared innocent, but almost always both die. No antidote is known, but the natives combat its effects by means of the bark of the *boulle-bete*, a species of acacia which produces abundant vomiting.—*Med. and Surg. Reporter*.

:O:

The Indications Afforded by the Pupil.

Numerous and valuable as are the indications furnished by the pupil, its condition does not receive from many the attention it demands. Most of us have certain vague notions on the subject, and all are aware that the pupil is liable to alterations in certain diseases. But a systematic arrangement of its deviations from the normal standard, with explanations of their causation, is still a desideratum. The subject is one of great intricacy, for the behavior of the pupil is sometimes paradoxical, and frequently it is difficult of explanation.

The small pupil of plethora and the dilated pupil of anæmia are constantly impressed on our notice, and appear to find simple and sufficient explanations in the fulness of the vessels and the quality of the blood. If we purge the plethoric patient, his pupils enlarge; and we estimate the anæmic patient's progress towards recovery by the diminution in the size of his pupils. Apart from general constitutional states on which it may depend, a contracted pupil indicates cerebral hyperæmia, whilst a dilated pupil affords the most valuable sign of cerebral anæmia. Thus the small pupil of the "ferrety eye" of typhus is aid to diagnosis and a good indication of the engorgement of the encephalic centres. Again, contrast the small pupil of mitral regurgitation with the dilated pupil of aortic insufficiency. In the various affections in which pulmonary circulation is embarrassed, the small pupil attracts attention no less than the lividity of the lips and the turgescence of the cheeks. So much is myosis an indication of venous engorgement in capillary bronchitis, pulmonary oedema, and the like, that the degree of the one may be estimated by the degree of the other, and it is observed that, if the livid patient with contracted pupil be bled, the pupil dilates as the blood flows. As a rule, the condition of the pupil may be taken to indicate the state of the circulation, perhaps more in relation to fulness of the vessels than to actual blood-pressure, some of the observations, however, on this point appear contradictory and require investigation.

In connection with nervous affections, the pupil has long engaged attention, and the older physicians carefully noted its behavior in certain diseases. In the various forms of meningitis and cerebritis, where there are signs of cerebral excitement, the pupil is small. But as stupor supervenes on excitement, the pupils become oscillating and dilated; and if this passes into profound coma, they are found widely dilated and immobile. In epilepsy, too, the different stages of the paroxysm, and the condition of the circulation which accompanies or causes them, find an exponent in the state of the pupil. A transitory dilation of the pupil is amongst the most valuable signs of an attack of *petit mal*. Again, in distinguishing between feigned and real convulsive seizures, the pupil serves the physician as a valuable guide. In the apoplectic patient, pinhole pupils enable the physician to locate the hæmorrhage in the pons Varolii; whilst great dilation of one pupil occurring coincidentally with hemiplegia of the opposite side is an indication of a lesion of the crus cerebri of the same side as that on which the eye is affected.

In aneurism of the aorta, the attention of the physician is sometimes first directed to the patient's malady by a difference in the pupils. In some diseases of the spinal cord—in locomotor ataxia especially—the pupils are almost habitually contracted. In the practice of the alienist the greatest value is attached to the state of the pupil, and he is almost able, for purposes of treatment, to classify his patients by his sign alone. In toxicology it serves as an important means of distinguishing between many poisons; and oftentimes the analyst makes use of the pupil in testing for some of the alkaloids.

But not only is the pupil of great service as a clinical guide—especially as a hæmadynamometer—but it has been recently shown that in it we have an instrument of the greatest scientific precision for testing sensibility. By its employment as an æsthesiometer results have been obtained which other instruments of research have failed to reveal. Heidenhain, Meischer, Dittmar, and others, have shown that irritation of a sensory nerve is followed by a rise of blood-pressure, and have employed arterial tension in this way as a test of sensibility. But Fox and Schiff have demonstrated that in the pupil we have a test of far greater delicacy. They have shown that in the curried animal, kept alive by artificial respiration, each irritation of a sensory nerve is followed by dilation of the pupil. This occurs not only when the effect is painful, but as the result of a simple tactile sensation. Simple pressure on the integument is sufficient to cause dilation of the pupil; and if the skin, rendered pale by pressure, be again touched, the pupil dilates still further. By this method they have ascertained that there is no portion of the body which is not possessed of feeling in this sense. In comparison with the blood-pressure, they show that dilation of the pupil follows upon excitation, before its effects

can be observed in the circulation, and that a tactile sensation too feeble to evoke a rise of blood-pressure causes an alteration in the pupil. In the dilation of the pupil is afforded an indication of such sensation having reached the brain, whereas an alteration of the blood-pressure may be affected without any such consciousness, its effects being expended on the spinal cord and medulla. The proof of this assertion is afforded by the effect of electrical excitation. If a current be applied to the anterior or lateral columns of the cord, there follows an increased blood-pressure, but no dilation of the pupil. The reflection from sensory nerves to motor nerves takes place in the cord, from sensory nerves to the pupil of the brain. In accordance with these facts the condition of the pupil has been proposed by Budin and Coyne as a guide in chloroform narcosis, but in this condition it affords neither safe nor satisfactory indications.—*Med. Exam.*

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Salicylic Acid in Acute Rheumatism.

A. McK., aged 35, was the subject of an attack of inflammatory rheumatism, in November, 1875.

November 22d. I was called at ten o'clock in the forenoon, and found my patient in bed, suffering severely and unable to move. Told me this was the third attack in four years. The attack previous to this lasted for eleven weeks. Had been taking gun guaiac, in brandy, for two weeks, but kept getting worse. I put him on the alkaline treatment, with tonics, nourishing diet, etc.; applied chloroform liniment to the swollen and painful joints, and rolled them up in cotton-batting.

November 23d. The joints hot, swollen, and exceedingly painful. Was perspiring freely. Temperature 102°. Pulse 110; tongue thickly coated; bowels constipated; urine high-colored and scanty.

December 10th. Patient greatly depressed in spirits; the joints still swollen, hot and painful; urine scanty; bowels constipated; tongue coated; pulse 100. Having noticed, in the cases which I saw reported, of the use of salicylic acid in this disease, that the relief was almost immediate, I resolved to try it. All previous treatment was discontinued, and I ordered ten grains of salicylic acid, in gelatine capsules, every two hours.

December 11th. Found patient feeling much better; the pain and tenderness was subsiding; bowels had moved once; pulse 90; tongue slightly coated; urine scanty.

December 13. Found patient lying on his side, pain all gone, but the joints felt stiff. Had slept nearly all night; urine not so highly colored; pulse 80; temperature 98°. Ordered the medicine every four hours, for the next twenty-four hours.

December 14th. Patient sitting up in a chair and able to walk very slowly around the room; bowels regular; pulse 80; urine more profuse and not so dark.

December 20th. Patient able to walk several rods out of doors, joints a little stiff, feels weak, but gradually recovering strength, appetite good, bowels regular, no pain or tenderness. There has been no return of the disease and no ill effects caused by the medicine. There was no other medicine used while using the salicylic acid, and no local applications. The only disadvantage with the medicine was a considerable irritation of the mouth and throat, and a hot burning sensation in the stomach.

CASE 2.—Lizzie K., aged 13, had been suffering for several days with severe pain in both lower extremities. I first saw her at seven o'clock in the evening; ordered three-grain doses of salicylic acid every two hours. Saw her again next day; pain nearly all gone, and feeling quite comfortable. Did not see her again for several days, when I met her on the street. She was up working in the house in four days from commencement of the salicylic acid, and has had no return of the disease.

CASE 3.—O. B. W., aged 22, was subject to an attack of inflammatory rheumatism, in March, 1876, affecting the right lower extremity. Ordered him seven grains salicylic acid every two hours. In twenty-four hours the pain and tenderness had all disappeared, but the joints felt stiff. Discontinued the medicine, and in twenty-four hours pain and tenderness in left elbow and wrist. Ordered the salicylic acid as before, and the next day was all right and has had no return of the disease since. After taking two or three doses, patient complained of nausea, but no vomiting, and as soon as the medicine was swallowed, a terrible burning sensation in the stomach. To relieve the burning sensation, I ordered oatmeal gruel, which relieved it almost immediately.—*Med. and Surg. Reporter.*

T. A. PERRIN, M. D.

Sheboygan, Mich.

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Public Health Questions in the United States.

Extract from Address. BY J. M. TONER, M. D.

Men live and carry on all their various avocations in an atmosphere only a few feet above the earth. A more important and comprehensive record of the actual meteorological phenomena occurring in the limited belt or sphere of man's activities, might be obtained, if all observations of temperature, moisture, rainfall, electricity, etc., were taken close to the earth. I allude to the subject with a view to encourage an exact uniformity of elevation and exposure of instruments in making observations. We are particularly interested in the condition of the atmosphere we

breathe, and should desire to know its exact conditions and extremes of variations. It is a well-ascertained fact, that the rain-gauge registers in the same locality more at the earth's surface than when placed at a considerable height. Changes of temperature, too, are effected by elevation, by radiation from the earth according to the seasons, and during the different hours of day and night. The thermometer ought, in my opinion, to be placed close to the earth, and never more than five feet above it, and be remote from buildings shaded from the direct rays of the sun; but exposed to the free currents of air, though cut off from the radiated heat from the ground.

We are gratified to observe that the importance of hygiene and sanitary inquiries engaged the attention of the last Congress of the United States, which passed an act authorizing the Surgeon-general of the Army, and the chief of the Marine Hospital Service, to investigate the history and cause of the cholera epidemic of 1873, and of the yellow fever epidemic during the same year—the first named to report on cholera, and the latter on yellow fever. The researches of these departments have resulted in the publication of valuable reports, which have added much to our knowledge of the history and characteristics of these diseases. Congress, too, with an awakening sense of its duties and responsibilities, is beginning to consider the subject of the food supply of the people. This indeed is a most important question to every government. An Act of Congress of 1873, authorized the organization of a "United States Commission of Fish and Fisheries;" the labors of this commission are chiefly directed to an investigation of the food fishes of the American coast and rivers.

This action of the government suggests an extension of the principle to other matters intimately connected with the obligation to consider all the conditions that relate to feeding, clothing, housing, and the general well-being of the people.

The meteorological observations being collected so systematically, and from all parts of the country, by the United States Signal Office, present a vast field for the study of the influence of climate, storms, and the like, upon health. The facts collected by this department are yearly coming to be more sought after by the physician. There is no occupation or mode of life that does not deserve to be investigated as to its influence upon health. Man's surroundings, his domicile, his clothing, his food, his habits, in childhood, in mature years, and in old age, all should be observed, with a view to discover the conditions which develop the highest vigor of body and mind, and secure the greatest longevity. We assume that life is a blessing. To preserve it is a duty, not a virtue. No circumstance is, therefore, trivial, that can unfavorably affect health or shorten our existence. Man's social instinct and moral nature in a measure make him "his brother's keeper." It is surely, therefore, a natural, if not a Christian duty, resting upon

all persons possessing the knowledge,—to point out the physical evils which flow from bad habits, and from the neglect of hygiene.

The statement is often made, and is generally believed, that residents of rural districts enjoy a higher average degree of health, physical strength, and a greater longevity than those who live in cities. If this opinion be correct, what are the conditions that secure such results? I am inclined to think that regular habits, as well as fresh food and pure air, have much to do in the attainment of this higher degree of vitality which common belief assigns to rural life. A philosopher says: "Habits makes the man." One of the most notable differences in the habits of the two is in the hours chosen for retiring. Country people undoubtedly sleep more, and have fewer disturbances during the night than the residents of cities. Can it be that peaceful lives, with abundance of sleep, are the chief factors in securing vigor, good health, and longevity? It seems probable that such is the case. Examples in confirmation of this view, will, I believe, occur to every one. The want of sufficient sleep at the proper time is, in my opinion, a fruitful cause of disordered functions and impaired health.

It is not likely that any suggestions of mine will lead to reform in this particular, but it is not, therefore, the less a duty to point out what contributes to vicious habits, and indicate the causes that are probably involved in the deterioration of the vital forces.

As conducing to an amendment in this regard, I would suggest that in cities all licensed restaurants and bars should be required by law to close at ten o'clock, and that theatres, and other places of amusements, commence at seven o'clock, so as to close at ten, or eleven at the latest. If it were possible to add one hour each night to the sleep of the residents of cities, I feel persuaded it would do much to elevate morals and preserve health.

A great American statesman is reported to have said that large cities are the plague spots of nations. Whether this be true or not in a political sense, there are many who believe that cities are in danger of becoming emenable to the charge in a sanitary point of view. The overcrowding that always takes place is to be deplored, and deserves the attention of statesmen and legislators. Large aggregations of people are constantly in a condition to be surprised by some contagious disease. Is it not reasonable that health organizations should in some way favor cheap transportation from cities into the country, so as to relieve the crowding of tenement houses. A measure of this kind, with a homestead exemption law, which would secure a cheap home even thirty miles from the city, with a lot for a garden to the head of a family, might do something to encourage a considerable number to live in the country, who now crowd into all sorts of abodes in large cities.

A homestead exemption law would probably give great encouragement to the poor of economic disposition, and who would take

advantage of it for the sake of a home where they might hope to raise their children to adult life, to do which is next to impossible in crowded cities. A law of this nature, or any other measure that would multiply small homes, and encourage rural life and garden culture, ought to be welcomed, since it is a recognized principle in political economy that the greater the number of small land-owners, the greater the strength and stability of a nation. -

Among the multitude of questions that press for consideration, there is one upon which I wish to say a word, as I understand it to be a usage, in some localities, and which I am sure all will agree in condemning as heartless and inhuman, namely, the practice of not removing a drowned person from the water immediately on discovery. Man's better instincts revolt at so barbarous a custom. I am informed that the opinion prevails, that individuals render themselves liable to prosecution if they meddle with a drowned body, even to attempt resuscitation, until the coroner arrives and assumes control. Such delay and inference as to any law upon the subject ought not to be sanctioned by our silence, as it is contrary both to the dictates of humanity and public policy. In cases of recent drowning, not a moment should be lost in removing the body from the water. It is well known that many lives have been saved even in cases of apparently complete drowning, by prompt, intelligent and persistent efforts at resuscitation. When a body that has not been longer than thirty or forty minutes under water can be recovered, attempts to effect a revival should be immediately commenced, by all such manipulations as will imitate natural breathing, whether in a boat or on shore, and they should be continued for more than half an hour. Any neglect of this duty ought to be esteemed highly reprehensible.

If the health and police regulations of cities having water fronts, do not contain laws in accordance with these principles, they must, I think, be considered defective, and should at once be amended. The sentiment, too, ought to be widely inculcated among all classes that it is man's imperative duty in every case of recent drowning to instantly remove the body from the water and to make every endeavor to induce resuscitation.

A Commission on Forestry for the United States was discussed at the last Congress, but failed to become a law, though the expediency of establishing some means to preserve the natural forests from wanton or negligent destruction, as well as the foundation of a systematic and comprehensive plan for planting trees, was fully brought before the public, in the discussion in the House of Representatives, and particularly in the report upon the subject made by the "Committee on the Public Lands," which recommended the enactment of a law for the appointment of a commission.

It is generally conceded that the rapid exhaustion of the great forests of our country has wrought important changes in our climate, disturbing the regular and equal distribution of rain.

Too much importance cannot be attached to the planting and preservation of trees, not only in the country but along all streets, and in every practicable locality in cities. Their vigorous growth along streets will shield from the glare of the sun, and if numerous, preserve by their refrigeration a slightly lower temperature in summer, and lessen the amount of dust on thoroughfares, and thus add to comfort and health during the heated term. The question of the importance of preserving timber for climatic, economic, and hygienic purposes will, it is understood, be presented to this Association by a gentleman who has given great attention to the subject.

Our country during the past year has been free from severe epidemics. Yellow fever appeared in some of our seaport cities. At Key West, and at Pensacola, Fla., where the government maintains both a military and a naval station, this disease appeared; also at Milton, Fla., at West Pascagoula, Miss., and at Howell's Station, twenty-five miles above Pensacola; and at Mobile, Ala., and at New Orleans, La. It was also taken to Brooklyn, N. Y., but by energetic measures of quarantine, and other hygienic and sanitary measures, the *scourge of the Gulf seaports* was suppressed wherever it appeared, not, however, until a number of deaths had occurred.

The Marine Hospital Service, and the local government authorities in the South, have been working harmoniously and efficiently together during the past season under an old law of the United States, requiring the co-operation of the revenue and military forces with the State health or quarantine officers for the protection of the public health.

Among the preventable diseases, diphtheria has been fatal to a degree that attracts special attention in the mortuary reports of the cities of New York, Brooklyn, Jersey City, Philadelphia, St. Louis and Boston. Small-pox, too, has persisted in claiming an excessive percentage of deaths in the cities of New York, Brooklyn, St. Louis, Cincinnati, and other places.

Next to the sewerage and drainage in its importance to health, we may place the lighting and ventilation of dwellings. Few others than physicians and health inspectors, who are called upon to attend the poor in large cities, crowded into tenement-houses, cellars, and garrets, can realize to what extent the breath, perspiration, and other excretions from the human body, detained in clothing or apartments, poison the atmosphere in which these people live. Often people of this class are so crowded together, that they are slowly but surely becoming their own executioners, and with poisons excreted from their own bodies. It is not generally realized that the excreta from the lungs and skin are greater in weight, for the twenty-four hours, than those from the kidneys and bowels.

Sending Plants to Sleep.

Several members of the Parisian Biological Society have recently been engaged in a series of experiments which seem to prove that everything endowed with life, whether animal, plant, or ferment, is susceptible of being brought under the influence of anæsthetics—in other words, may be sent to sleep. It has been proven that the influence of anæsthetics extends to all the animal tissues, and last of all to the central nervous system. Hence, it was argued, plants having tissues must also be subject to the influence of ether, etc. Experiments prove this to be the case. Germination is arrested by anæsthetics. The water-cress, for example, germinates within thirty hours. Ether arrests germination in this plant, but does not destroy that faculty. It merely sends the plant to sleep, for germination re-commences as soon as the use of ether is suspended. But the sensitive plant furnishes a still more striking illustration. Its sensitive faculty is rendered completely dormant by etherization, while the other living properties remain unaffected. On suspending the action of ether, the sensitive faculty of the plant is quickly restored. This capability of being sent to sleep is not confined to plants; it extends to ferments. Thus the ferment of beer, when submitted for twenty-four hours to the influence of ether, becomes perfectly dormant, but recovers its activity as soon as the anæsthetic action is suspended. In future the practical botanist must not pursue his cruel rambles without the assistance of one of the Clover family.—*Med. Exam.*

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NEW METHOD OF TREATING URETHRAL STRICTURES (*The Medical Record*, January 13, 1877).—At the meeting of the Académie de Médecine at Paris, on November 7, 1876, M. C. Fort described a method of treating urethral strictures of small calibre, which he has employed for seven years with great success. He first passes a filiform bougie through the stricture and leaves it in position for twenty-four hours. The presence of the bougie excites a slight inflammation of the tissues that form the stricture, which softens them and renders them more extensible. The bougie is provided with a metallic cap, to which catheters of various sizes may be attached. At the end of twenty-four hours a conical catheter, three millimetres in diameter at the largest part, is attached to the bougie and pushed forward through the stricture, the guide keeping it in the proper direction. The catheter is then withdrawn until the metallic cap on the end of the bougie emerges from the meatus. The catheter is now detached from the bougie and replaced by another, which is five millimetres in diameter at its largest part. This is in turn made to traverse the stricture, then

withdrawn, and replaced by a third catheter which measures seven millimetres in its largest diameter. The bougie during the passage of the catheters coils up in the bladder, where it can do no harm. By this method even very tight and indurated strictures may be completely dilated at a single sitting. The guide removes all danger of making a false passage. The pain is so slight that anæsthesia is unnecessary. The operation rarely causes any hemorrhage.—*Med. Times*.

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"Advanced Thinkers."

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That single expression—advanced thinkers—will do more to establish theories and doctrines, and practices also, than learning and experience and wisdom combined. Let a man who differs from the mass be pronounced by common consent an advanced thinker, his fame is established, no matter how extravagant his notions. To say that a man is an advanced thinker, means, as a general thing, that he don't think at all, but is captivated with some popular idea of some popular scientist, or that he aspires at notoriety by identifying himself with such. Time was when advanced thinking was a dangerous business, which men did not dare accept under penalty of martyrdom. Now it is the reverse. Advanced and original thinkers are really but few, and their advance is often more apparent than real. They often but exhume the old and instal it as new. Our age has much need of individual and independent thought. Men are afraid to hold fast to the past or the present in view of anything claiming to be in advance. It is in theology, in general science, in medicine. Better maxim than this was never uttered: "Prove all things—hold fast that which is good."—*Pacific Med. and Surg. Journal*.

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THE ANTIZYMOTIC TREATMENT OF DIPHTHERIA.—Dr. Pavesi describes, in the *Annali di Chimica Applic. alla Medicina*, 1876 (abstract in *Annali Universali di Medicina*, August), a formula which he recommends in the treatment of diphtheria. It is founded on the antizymotic properties of chloral, salicylic acid, and the sulphites. It is as follows: $\mathcal{R}$: Chloral hydrate, salicylic acid, glycerine, sulphite of soda, each $1\frac{1}{2}$ parts; distilled water, $3\frac{1}{2}$ parts; spirits of wine, 1 part. The whole is put into a strong glass vessel, which is closed, and exposed to a heat of 100° to 120° Fahr. for a few minutes, until the sulphite, silicylic acid, and chloral are completely evolved. A homogeneous solution is produced, which is filtered through bibulous paper, and preserved in a well-closed vessel. It is an oily, limpid, colorless liquid, having the odor of

its constituent parts. It is insoluble in water. On the application of proper tests, the chloral, salicylic acid, sulphite of soda, and glycerine are found to be unchanged. Used both internally and externally, it is an energetic antiseptic, anti-fermentative, disinfectant, hæmostatic, and preservative, as well as a destroyer of parasitic organisms. Dr. Pavesi says that it may be used as an antiseptic, and also as a sedative, in a large number of diseases.—*London Med. Record*.

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TORRANCE, MISS, Feb. 16, 1877.

Dr. E. S. Gaillard:

A BLOODLESS OPERATION.—A negro woman requested me a short time since to get a piece of needle out of her arm, which she said had been accidentally lodged there about three years ago. I seated her near a table, applied a tourniquet buckled loosely about the middle of the arm, with the pad over the brachial artery; I then elevated the arm, with the hand higher than her head; an assistant pressed the pad, so as to stop the circulation in the artery; I then rubbed the hand and arm, forcing the blood from the limb through the veins to the body, then tightened the band of the tourniquet, so as to prevent all circulation of blood in the limb beyond; I then laid the hand on the table, made an incision through the skin about an inch long and extracted a piece of needle half an inch in length. The tissues were entirely blanched; I dressed the wound before removing the tourniquet, and did not see a particle of blood, the knife was not stained. This case demonstrates very fully the fact that the bloodless operation can be performed on the extremities without any new contrivance, the ordinary tourniquet being fully sufficient.—*Am. Med. Bi-Weekly*.

Respectfully,

WILLIAM POWELL, M. D.

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NEW OBSERVATIONS CONCERNING THE THERAPEUTIC ACTION OF CARBOLIZED CAMPHOR.—Dr. Soulez publishes, in *La France Medicale*, of January 11, 1877, a series of cases in which he successfully employed the carbolized camphor. This antiseptic, of which he speaks so highly, is obtained by dissolving nine grammes of the crystals of carbolic acid in one gramme of alcohol; to two grammes of this solution is then added twelve grammes of powdered camphor—the syrup-like liquid which results is the carbolized camphor. For dressings the carbolized camphor is reduced (one part to nineteen of olive oil or oil of sweet almonds), and in the mixture are saturated square pieces of lint, which are then applied, one over the other, to the wound: these are covered by a sheet of thin india-rubber, and on this, again, dry lint is bound with a bandage. M. Soulez claims for this dressing three great advantages: suppression of pain after the operation, absence of febrile reaction, and, finally, rapid cicatrization.—*Chronic*. J. L. A.

Editorial.

Buffalo Medical and Surgical Journal.

After a period of repose,—apparent death, our JOURNAL faintly utters the dying words of Daniel Webster, "I still live," as much astonished at the fact as was the great statesman when he uttered the ever memorable words. Our JOURNAL, the pride and joy of our lives, could not withstand the financial depression of the recent Presidential Election, but we have agreed to unite our efforts and test the effects of transfusion, hoping it may yet revive and breathe again. The former editor under whose conduct the JOURNAL first sprung up and grew into popularity, has again consented to head the editorial staff, and with the aid of his associates and the Medical profession generally he now assures the readers of the JOURNAL that they will hereafter receive about the first of every month a Journal "what is a Journal," containing everything in Medicine and Surgery which is of any practical importance to know. As formerly it will be conducted wholly in the interest of the Medical Profession, and to it we look for patronage and support. Thus sustained it cannot fail or stop, but will be issued promptly and regularly, ample provision having now been made for the outlay of publication. Physicians in western New York are not willing to have it stop, and with the support which it has formerly received, it will not grow weary or tardy in appearance. It has for many years been a medium of communication with the profession, and it is now proposed to continue its influence. Progressive and inventive men are invited to support it, to send to it their best thoughts for publication, and to render it all the substantial aid in their power. It is to the profession we trustingly look as in former years for support. As Editors we promise earnest and impartial effort to make the JOURNAL a welcome visitor to every Physician's table.

Practical Medicine and Surgery is our specialty. We shall not take any other business even if it is offered. Medicine and Surgery in its widest, truest, and broadest scope is the sole object of our ambition. We shall study it carefully and practice it faithfully, and when better opportunity offers will tell those who read the JOURNAL what we have to say about it, and what the profession generally have to say about it.

You will all ask why the JOURNAL has been so late and irregular, and at last stopped altogether; frankly then, one young Physician, depending upon a small professional income could not incur the expense of publication, and wait for his subscribers to "help him out."

Hereafter, if we do not send you a readable, instructive, entertaining Journal you will not pay for it, but we expect by combined effort to send you the

best small unpretending Medical and Surgical Journal published in the world. Now see if we redeem our promise, and do it so satisfactorily that the wherewith to continue publication will be urged upon us at every step.

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Annual Commencement of the Buffalo Medical College.

The annual examination before the Faculty and Curators, was held Tuesday, February 20th, 1877, resulting in the graduation as *Doctors in Medicine* of the following gentlemen:

THE GRADUATING CLASS.

Arthur Martin Barker, Buffalo, N. Y.; James Henry Tamblin, Black River, N. Y.; Joseph Haberstro, Buffalo, N. Y.; George Heman Saddleson, Cambria, N. Y.; Edward Eckerson, Shelby, N. Y.; Charles Shupe, Font Hill, Ontario; John Warner Huntington, Mexico, N. Y.; Francis Waters Gallagher, Buffalo, N. Y.; Sylvenus Emmons Parker, Sanborn, N. Y.; Seldon Johnson Mudgr., Olean, N. Y.; William Francis Sheehan, Rochester, N. Y.; Edward N. B. Mershon, Youngstown, Pa.; Lee Herbert Smith, Buffalo, N. Y.; Daniel Williams Allen, Buffalo, N. Y.; Cyrus C. Harvey, Dundee, N. Y.; John Emery Copp, Sinclairville, N. Y.; Fred. Liona Gould, Frewsburg, N. Y.; Arthur Edson Blair, Castle Creek, N. Y.; John Howard Miller, Rouseville, Pa.; Frank Eugene Cruttenden, Bath, N. Y.; Henry Amos Wilmot, Spencerport, N. Y.; Charles Edgar Heaton, Mexico, N. Y.; Frank Guy Sherwood, Medina, N. Y.; John R. Mullen, Alexander, N. Y.; George S. Wyckoff, Buffalo, N. Y.; Louis Charles Volker, Buffalo, N. Y.; Francis B. Kendrick, Buffalo, N. Y.; Arthur Lee Lowe, Corry, Pa.; John J. A. Burke, Rochester, N. Y.; Edwin Richard Hopkins, Westfield, N. Y.

The examination was highly satisfactory, the whole class acquitting itself very creditably.

The public exercises of the occasion were held in the evening, and were largely attended. After the conferring of Degrees by Prof. WHITE, Vice Chancellor of the University, Prof. E. V. STODARD delivered the Address before the Graduating Class. This was a highly interesting and instructive feature of the day. As the daily press published the various addresses of the day and evening, it is unnecessary to speak of their merits or republish them. If we had expected to select the material for this Journal at that time, we should have provided for it.

After the conferring of Degrees, Prof. ROCHESTER, Dean of the Faculty, announced that prizes had been given in the College during the past few years for excellence in certain branches of study, and he took pleasure in making public the names of the successful competitors and presenting the prizes, which he did as follows:

The Fillmore Prize.—1st, \$30. Awarded to Wm. F. Sheehan, of Rochester, N. Y.

2d, \$10. Divided between Arthur M. Barker and Lee H. Smith of Buffalo. Honorable mention was made of Francis W. Gallagher, of Buffalo.

Committee—Profs. Stoddard and Moore.

The Prof. White Prize.—A complete Obstetrical case of instruments. Awarded to Francis W. Gallagher, of Buffalo. Motto: "Ministry of Buffalo."

Committee—E. N. Brush, M. D., E. C. W. O'Brien, M. D., W. W. Miner, M. D.

The Prof. Rochester Prize.—A complete Stethoscopic case. Awarded to Wm. F. Sheehan, of Rochester, N. Y. Motto: "*Pro Bono Publico*."

Honorable mention was made of Thomas M. Rochester, of Rochester. Motto: "Marius."

Committee—Frank W. Abbott, M. D., W. C. Phelps, M. D.

The Prof. Moore Prize.—A copy of "Holmes' Surgery." Awarded to Wm. F. Sheehan, of Rochester.

The Prof. Miner Prize.—A complete miner pocket case. Awarded to Thomas M. Rochester, of Rochester, an under graduate. Motto: "Marius."

The Prof. Potter Prize.—A complete anatomical case. Awarded to Francis W. Gallagher, of Buffalo.

The Prof. Stoddard Prize.—Stille's "Therapeutics and *Materia Medica*"—2 vols. Awarded to Lee H. Smith, of Buffalo.

Honorable mention was made of Wm. F. Sheehan, of Rochester, and of Arthur M. Baker of Buffalo.

It is almost needless to state that the friends of the young gentlemen cheered them warmly as they were called out. After some music came the address to the graduates, by Prof. E. V. STODDARD, which on account of its rare merit we will publish in our next Journal, if we can secure a copy, the public not having obtained it.

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Third Annual Meeting of the Alumni Association of the Medical Department of the University of Buffalo.

The Third Annual Meeting of the Alumni Association of the Medical Department of the University of Buffalo, was held in this city February 20, and in all respects was as important as any of its predecessors. In the evening the Annual Commencement of the Medical College took place at St. James Hall. A supper followed in the reading room of the Young Men's Association, and a day's good work was succeeded by a season of festivity which the guests will remember long and pleasantly.

The address before the Alumni Association, by Prof. Frank H. Hamilton, of New York City, is of so much interest and is so suggestive to the profession generally that we must indulge in publication of some of the paragraphs even though the newspapers have had the first publication. After a beautiful introduction he says:

Gentlemen, my visit here is especially to meet and talk with you; but so many thoughts obtrude themselves after my long absence from the city that it seems impossible for me to give to you that undivided attention which, as your guest, you have a right to claim. Moreover, I feel myself at a loss what, in the brief time allotted to me, it is best to say. Most that I have learned in the interval of time which has separated us you have learned also. Our science has made progress, but you have kept pace with it. I have had personal experience and so have you. I can no longer take you into the old

amphitheater and swing around the circle having all the talk and opinions on my own side—enforcing those statements which are difficult to understand with “demonstrations” equally difficult to see. You are here as my peers, and I feel diffident of my ability to either instruct or entertain you. Please indulge me then in my caprices, and permit me to say whatever comes uppermost.

SPECIALTIES IN MEDICINE AND SURGERY.

The question of specialties in medicine and surgery has of late attracted a good deal of attention and given rise to considerable discussion. The question is, are they useful; do they tend to advance our science? I answer yes and no. There are two sides to this question as there are most other questions. Within certain limitations and upon certain conditions they are useful, and the converse is equally true. To understand this matter, let us see what has happened within a few years. When I commenced the practice of my profession, and within your recollection, we, who simply called ourselves Physicians and Surgeons—general practitioners—occupied the field. There might have been here and there a strolling specialist, but they failed generally to secure the confidence of the people or to make any dangerous inroads upon our practice. Our legitimate right to the entire territory was practically undisturbed. Since then, however, following upon a few established successes, there has sprung up suddenly a great excitement, such as inevitably follows the rumors of the discovery of a new bonanza; and emigrants, with no other capital than a pick and gun, have crowded into the territory, and never so much as saying “by your leave,” they have selected their ground and driven their stakes until little or nothing is left to the original proprietors, but the barren title of Doctors, and which title is found to have no weight in law as against the intruders. To-day there is scarcely an organ of the body or an anatomical or classified structure into which their stakes have not been driven, and from which trespassers are not warned. Let us mention

A FEW OF THESE SPECIALTIES.

For the head there is the oculist; the aurist; the catarrh doctor for the nose; the throat doctor; the dentist, of whom there are several subordinate and separate departments.

There are heart doctors, and lung doctors, and some who include both of these important organs in their practice, and might properly be called chest doctors. The liver is an old claim, which was worked a good many years and then abandoned as being worked out. There are kidney doctors, also; but no one has ever driven a stake into the spleen, although I do not see any good reason why it might not be worked profitably. There are a great many people who are spleeny and if any one could summon the courage to put up a sign, I am sure he would be well patronized.

There are doctors for the nerves and for the blood; doctors who can expel by their medicines all the bad humors and leave their patients in good humor. There are skin doctors and bone doctors, spine doctors and crooked-leg doctors, natural bone-setters, hair doctors and corn doctors.

There are doctors for women, also, as distinguished from doctors for men: but there are no doctors for men as distinguished from women. We do not feel offended at this act of partiality toward women. Bless their souls, no. So far as we are concerned, we would be quite willing they should have all of the doctors, and that we should be left to suffer and die without their help. But one cannot help asking whether, if it be true that the *corde tendine* of women's hearts are more delicate than ours, and their nerves are attuned to a higher key—whether admitting this and much more, there is really any more difference between a woman and a man than between a man and a woman; or whether the establishment of the specialty of a woman doctor, means that a woman is a man *plus* a woman, and that a general practitioner cannot be expected to attain to a knowledge of the *plus*? I have only this morning seen an advertisement in a Syracuse paper, in which a Homœopathic doctor

announces that he makes a specialty of children. Very small ones I suppose.

I have not, by any means exhausted the list of specialties which are to-day recognized in medicine and surgery; but I think you will see that there is a good deal of crowding, packing edgewise and some overlapping, and that not much chance is left for the old-fashioned physician and surgeon.

The condition of matters will be best illustrated by a supposed case; and which I shall take care not to exaggerate very much beyond what has repeatedly come under my own observation.

A lady called upon a physician for advice, stating that her health was "completely broken," and that she was "affected with a frightful collection of maladies," but as she did not specify them particularly, the doctor began to interrogate her about the condition of her nervous system; when she replied promptly that he need not trouble himself to inquire into that matter, as she had consulted Dr. Brown Sequard, and under advice she had taken strychnine and iron, and phosphorous to build up her nerves. The doctor then suggested that he would like to examine her heart. "Oh," said she, "that is in a very bad condition, but Dr. Clark is giving me aconite, belladonna and digitalis to lower its action." "Your lungs," said the doctor inquiringly. "Dr. Metcalf has examined my lungs," was the ready reply, "and I do not care for any other advice in that matter. He is giving me several cough mixtures." "But I notice," said the doctor, hoping that he had hit upon the weak point, and the one which she proposed to entrust to his special guardianship, "I observe that you have still some cough, and perhaps the trouble is in your throat rather than your lungs." "Dr. Metcalf thought this might be so," said she, "and he sent me to Dr. Elsburg, who says there is trouble there, also, and he is applying daily iodiform spray, and other things." "You wear glasses?" "Yes, my sight was a little affected, but Dr. Noyes thinks they will be cured if I wear glasses and take his medicines long enough."

"Pray, madam," exclaimed the Doctor completely baffled in his attempt to find an unprotected point in this splendid line of defenses, "will you kindly inform me what organ, or fragment of an organ, or tissue you wish to place under my charge, or consult me about?" "Yes, Doctor, if you please. I have consulted a good many other specialists, and as I am abundantly able to do so, and as health is of more value than money, I propose to consult them all. I know you by reputation very well and I felt sure you could tell me better than any one else who makes a specialty of warts, and I would thank you to give me a letter of introduction to whoever you think is best. I have a wart on the back of my neck, and as I would not like it to leave a scar, you will please recommend me to some one who will cure it without cutting."

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The United States Pharmacopœia.

We have on our table two pamphlets, one proposing and advancing certain changes in the methods of revision and in the character of the United States Pharmacopœia. The first of these is by Dr. Squibb, of New York, who will probably furnish copies to those interested, on making application. The second is by Dr. H. C. Wood, whose pamphlet can be obtained of J. B. Lippincott & Co., of Philadelphia. We shall have more to say of them hereafter.

Back Numbers.

December, January and February numbers of the JOURNAL have not been published and cannot now be published in time to be respectable. As we are wholly unwilling to publish a journal late, we shall omit them altogether and deduct their value from the price of Vol. XVI. Hereafter we shall issue our journal regularly and promptly. If it is not received, it may be assumed that the Post Office department of the United States is at fault, and we want notice of the failure.

Books Reviewed.

✓ *A Treatise on Surgery, its Principles and Practice* By T. HOLMES, M. A., Contab., etc. Philadelphia: Henry C. Lea, 1876.

Mr. Holmes says in his Preface that this volume is the result of an attempt to represent the present condition of Surgery as taught in England, by a treatise which shall not be unworthy to rank with the other excellent textbooks in use in the schools. The work was also undertaken that it might be to some extent an introduction to the more elaborate System of Surgery of which he is the Editor. The well known ability of the author as a surgeon and as a writer on surgical topics will be as excellent an introduction as he could desire for his work.

The opening chapter is upon inflammation and the process of union in soft parts, traumatic fever and dressing of wounds. Under the latter head the author announces his preference for the method of Lister, at the same time expressing the opinion that the opponents of the germ theory have the best of the argument. Mr. Holmes cites an instance which illustrates the value of this method, and which at the same time bears upon a point which we have seen alluded to by a recent writer, whose name at this moment escapes our memory. We refer to the value of the carbolic spray which Mr. Lister deems so essential to the proper dressing of wounds. The case cited by Mr. Holmes is one of compound fracture of both bones of the leg, in the treatment of which it was found necessary to resect more than two inches of both bones. Under Lister's method no traumatic fever was experienced and the wound healed rapidly and kindly. It strikes us that prior to the operation abundant opportunity had been given for the access of whatever agent is provocative of inflammation, to the wound as much as there would be during any of the subsequent dressings and that it would be as easy to cleanse the wound at the time of dressing and prevent the entrance of putrefactive agents, disease germs or otherwise, as at the original operation, without resorting to the

trouble of the spray or "antiseptic veil." Certainly no spray was playing on the wound from the moment of its reception up to the time of the operation, and yet no serious results followed. Why, therefore, if the same precautions are taken to cleanse the wound prior to the application of dressings, is it essential to keep a constant spray playing during the opening of an abscess or the dressing of a wound?

We have neither the time nor space to notice this work as it deserves. We can simply say that from a somewhat careful examination, we have formed a high estimate of its merits as a text-book.

B.

✓ *Cyclopædia of the Practice of Medicine.* Edited by Dr. H. VON ZIEMSEN. Vol. XI. *Diseases of the Peripheral Cerebro Spinal Nerves.* By Prof. WILHELM HEINRICH, Erb., Translated by Mr. HENRY POWER, of London. ALBERT H. BUCK, M. D., Editor American Edition. New York: William Wood & Co., 1876. Buffalo: H. Matteson, Agent. (Subscription only.)

This work treats of several diseases which are but little understood, although of frequent occurrence. The author holds to the division of diseases of the peripheral nerves into functional and anatomical. Under the first are included neuralgia, hyperæsthesia, anæsthesia, paralysis, spasm, etc. Under the latter division he includes hyperæmia, atrophy, inflammation, etc. Over one hundred and seventy pages are devoted to a very interesting discussion of neuralgia. Under Etiology the author makes some interesting remarks upon predisposition to certain neuroses and touches upon the fact that heredity has a large place in the etiology of many nervous diseases. We are pleased with the author's remarks upon this topic and only wish that they could be read by every physician. In the treatment of neuralgia the author speaks very highly of electricity. The faradic current he uses chiefly in peripheral neuralgia. In these, the writer has seen some most admirable effects from the use of the rapidly interrupted faradic current. He has also found it to be of value, combined with the galvanic current, in the treatment of neuralgic pains the result of lead poisoning. Some concise rules are given by the author as to the modes of applying electricity.

The author also dwells to some extent upon the uses of electricity in the differential diagnosis of various nerve lesions, and in the examination of paralyzed nerves and muscles.

The article on paralysis is of special interest as is also that upon "cramps," that common and oft painful affection which either from carelessness or ignorance of its importance in many instances is but little understood.

The volume as a whole is one of the most interesting of the series, and its careful perusal by physicians is recommended.

B.

A Century of American Medicine—1776–1876. By EDWARD H. CLARKE, M. D., late Professor of Materia-Medica in Harvard University, etc.; HENRY J. BIGELOW, M. D., Professor of Surgery in Harvard University, etc.; SAMUEL J. GROSS, M. D.; D. C. L. OXON, Professor of Surgery in the Jefferson Medical College, Philadelphia, etc.; T. GAILORD THOMAS, M. D., Professor of Obstetrics, etc., in the College of Physicians and Surgeons, New York, etc., and J. S. BILLINGS, M. D., Librarian of the National Medical Library, Washington, D. C. pp. 366. Philadelphia: Henry C. Lea, 1876.

This book is a reprint from papers which have recently appeared in the "American Journal of the American Sciences," and at once adapted to the wants of the careful student, the busy practitioner, and the intelligent non-professional reader. The distinguished names upon its title page are a guaranty of its intrinsic excellence. Its small size and moderate price bring it within the reach of all. It is full of rich suggestions and is an epitome of wisdom, aside from its great historical interest and value, and is a timely, appropriate, and much needed contribution to the literature of to-day. We see but one omission, or addition which might still further insure its usefulness, and that is a lack of marginal dates, for which there is ample room, and which would be a great convenience to the careful student.

Dr. Clarke's paper is upon "Practical Medicine;" Dr. Bigelow's, "A History of the Discovery of Anæsthesia;" Dr. Gross's, upon "Surgery;" Dr. Thomas treats of "Obstetrics and Gynæcology" and Dr. Billings of "Literature and Institutions."

Taken together these papers form a book which is surely interesting, comprehensive and instructive, and should be very generally read, being of exceeding value both to those within and without the profession.

A Treatise on Hernia: With a New Process for its Radical Cure, and Original Contributions to Operative Surgery, and New Surgical Instruments. By GREENSVILLE DOWELL M. D., Professor of Surgery in Texas Medical College, etc., etc. Philadelphia, D. G. Brinton, 1876.

The author of this work evidently believes in demonstrating the truth of the maxim, "of making many books, there is no end," and without a very great show of "rhyme or reason," puts forth a "Treatise" on Hernia. About thirty pages are devoted to the description of Hernia, but they present no facts which cannot be better treated in almost any work on Surgery. A student attempting to gain information from this portion of the work would be led into inevitable

confusion by the many terms by which the author defines the various varieties of hernia, as, for instance, infundibulatic, diverticulatic, intusceptic, ligmentatic, etc.

The author's method, briefly stated, consists in surrounding the canal by one or more wire ligatures, as the case demands, which are tied over a roll of adhesive plaster or other substance, so as to approximate the sides of the canal. The ligatures are allowed to remain eight days. The wire is made to pass into the peritoneal cavity, which, it would seem, adds materially to the dangers of the operation. To facilitate the passage of the wire the author employs a double pointed curved needle with an eye in each extremity.

Dr. Dowell, on page sixty-seven, informs us that he has, up to Sept. 12th, operated on sixty-eight cases with sixty cures; to these may be added one case operated on Sept. 13th, reported as successful. This is certainly a very remarkable result, and suggests a little examination of the cases. Cases 13, 14 and 15, are reported on the pages open before us (66, 67). Case 13 was operated on April 19, 1876, Case 14, the same date, Case 15, on May 26; on August 28th, a little over *four months* from the time of the first operation, they are called perfect cures; certainly the time which had elapsed since the operation, was too brief to determine the final result in these cases. We think that if Dr. Dowell will examine his cases at the end of a little longer time, he will find that the result is not as good as he anticipated, and that his statistics will have to be materially altered. The original contributions do not constitute anything of note.

✓ *Studies, Chiefly Clinical, on the Non-Emetic use of Ipecacuanha. With a Contribution to the Therapeutics of Cholera.* By ALFRED WOODHULL, M. D., Asst. Surgeon U. S. Army. Philadelphia, J. B. Lippincott & Co., 1876. Buffalo, Peter Paul & Bro.

The object of this essay is to call attention to the value of Ipecacuanha as a therapeutic agent, aside from its emetic properties. Dr. Woodhull advances the statement that it is a nervous stimulant acting chiefly upon the sympathetic system. He has evidently given the subject considerable attention, and has carefully searched authorities for evidence of its uses as a non-emetic. A long list of affections are cited in which it has proven more or less useful, beginning with dysentery. The writer has had somewhat gratifying evidences of its value in this disease, in Hospital practice, but has never administered it in as large doses as are used by Dr. Woodhull.

The value of Ipecacuanha in bowel and gastric troubles we think, in all probability, is not fully appreciated, and there are other affections, doubtless, in which it will prove of use when administered in sufficiently large doses, but whether the author's high opinion of it will ever be fully endorsed, time and careful trial alone can tell.

Books and Pamphlets Received.

Healthy Skin: A Popular Treatise on the Skin and Hair, their Preservation and management. By Erasmus Wilson, F. R. S., F. R. C. S., Eighth Edition. Philadelphia: Lindsay & Blakiston, 1876.

Chemical and Microscopical Examination of the Urine in Health and Disease. By Geo. B. Fowler, M. D. New York: G. P. Putnam's Sons, 1876. Buffalo: Peter Paul & Bro.

The Electric Bath: Its Medical Uses, Effects and Appliances. By Geo. M. Schweig, M. D. New York: G. P. Putnam's Sons, 1877. Buffalo: Peter Paul & Bro.

A Series of American Clinical Lectures. Edited by E. C. Seguin, M. D. Vol. II. New York: G. P. Putnam's Sons, 1877. Buffalo: Peter Paul & Bro.

Transactions of the American Medical Association: Twenty-seventh Annual Meeting, Philadelphia, June, 1876. Philadelphia: Printed for the Association.

Cyclopædia of the Practice of Medicine. Edited by H. Von Ziemssen. Vol. VI.: Diseases of the Chylipoetic System. New York: Wm. Wood & Co. Buffalo: H. Matteson, Agent.

Report on the Influence of Climate on Pulmonary Diseases in Minnesota. By Franklin Staples, M. D.; Reprint from Transactions of American Medical Association.

Fifth Annual Report of the New York Ear Dispensary. New York: G. P. Putnam's Sons, 1876.

The Operations of Vesico Vaginal Fistula: A Comparison of the Methods of Operating of N. Bozeman, M. D., of New York, and Prof. Gurtan Limon, of Heidelberg. With Illustrations. Translated from Weimer Woehenschrift by A. C. Bernays, M. D. St. Louis: Reprint from Richmond and Louisville Medical Journal, 1877.

Tablets of Anatomy and Physiology. By Thomas Cooke, F. R. S., Eng., M. D. Anatomy Ear, Eye. Physiology: Part I. New York: Wm. Wood & Co., 1873.

Thirty-seven Operations for Thoracentesis by Pneumatic Aspiration. By Frank Donaldson, M. D. Reprint from Transactions Medical and Chirurgical Faculty of Maryland. Baltimore: 1876.

B U F F A L O

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No. 9.

Original Communications.

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ART. I.—Address of Prof. E. V. STODDARD to the Graduating Class of Buffalo Medical College, Feb. 20th, 1877.

Gentlemen of the Graduating Class:

The Olympic festivals of Greece called together representative men of thought and power in the nation ; so our college anniversaries call together those of the profession who are giving it its strength and character.

We do not meet for games of skill and strength, nor do we, like the "Knights of the Round Table," gather for a tournament and exhibition of chivalric prowess. Our anniversary is one of quiet retrospect and hopeful prospect.

We meet to-day to read one more chapter in the history of the medical scholar ; to inquire what light another year, with its changing events, has shed on his character and hopes ; and to impart to those who are about to go forth from the fostering care of our Alma Mater, hope, confidence and inspiration. We find that we are working together to stem the tide of ignorance which we encounter on every side, and to develop and foster the growth of the tree of science.

The college is the center of influence in the midst of this struggle. The men whom the college educates are the men who go forth to join in the strife. They have not been educated for themselves alone, but to fill a sphere in life.

It is not assumed that every graduate leaves the college, like Minerva from the brain of Jupiter, fully armed and equipped for every emergency; but that he has been so educated that he may stand in society as a source of influence, and as a center from which truth shall radiate. The scholarship which has been held up as his ideal has been that which shall expand the mind, enrich the memory, develop the intellectual power and make him the untiring investigator in the search for truth.

There can be no higher mission for true scholarship than to awaken the public conscience to the advancement of the public good. It is the scholar as the representative of thought. It is the scholar as the disciple of truth! It matters not whether this thought and truth come from the teachings of Cicero, the art of Michael Angelo, the philosophy of Aristotle, or the science of Newton, of Faraday or Tyndall. Scholarship, to be effectual, must be aggressive; it must, with a consciousness of right, nail upon the door of the temple of learning its theses, and challenge the world to judge their truth.

In addressing you on this occasion it has seemed fitting to ask your consideration of "*the claims of the profession on the medical scholar of to-day.*"

The developments of science and of every department of learning have opened a new world to the student of to-day. Before him lies an enchanted land, where mysteries hitherto forbidden fall into the hand, and heights hitherto unattainable spread out before the feet. Yet, with all this wonderful advance in expansion of our knowledge, there stand before us great questions to be answered, which our increasing knowledge shows in broader relations and more important aspects. With our growing appreciation of the character and causes of disease we are rapidly learning that, within the domain of Preventive Medicine, far more of the possible lies than in that of Curative Medicine. While we congratulate ourselves upon the progress made, we recognize the fact that our

problems are but partially solved and that great questions stand before us, like the obelisks of antiquity covered with hieroglyphics, whose answer will tax our utmost effort and call into service our keenest powers of analysis.

As our civilization advances and becomes more complex in character, we note with anxiety that the physical and mental condition of man, as regards health, are depreciated. It becomes us to look well and earnestly into the causes of this condition. Thus the great questions which meet us at the outset are in the field of Sanitary or Preventive Medicine.

Hœcker has truly said, "the State which founds its legislation upon a knowledge of realities, which expects from the physical sciences information respecting human life collectively considered in all its relations, has a right to demand from its physicians a general insight into the nature and cause of popular disease."

The present year is one eminently suggestive to us. As we pause, and look backward over the foot-prints which have been left by the fleet-footed years of the century just completed, and note the development of national wealth, power and intellectual culture, we are struck with the fact that the brilliancy of our civilization is dimmed by a rapidly growing cloud. So rapidly does this cloud assume threatening proportions that it becomes us to look well toward averting the rising storm. The danger lies in the fact that, as our civilization becomes more elevated and complex in character, the physical and mental conditions of man, as regards health, are depreciated; and phases of physical and mental disease are the result.

What is there in our civilization which has this tendency, and what are the evils to be met?

Civilization we consider as simply the result of the struggle between man and the circumstances of his environment. External to man are certain physical forces constantly in operation, which tend to impair and destroy his organism. Within the man are certain vital and intellectual forces which are as constantly at work to resist the external destructive force. Between these two forces a ceaseless strife is maintained.

As man gains the ascendancy, and becomes superior to the de-

pressing circumstances of his environment, there results a condition which we call civilization; which is elevated in proportion to man's power of proving himself superior to his surroundings. Thus we have man's modifying nature, and nature modifying man, and out of this reciprocal modification what we recognize as civilization must emanate.

We must look then to the surroundings of man to find an explanation of the depressing and destructive tendencies to which I have referred.

It is the learning to know man through the medium of nature, through a thorough understanding of the circumstances of his environment, and the relation of his life to them, that must develop scientific medicine. It is in this way only that we can become truly observers of nature, thus fulfilling the province of the physician. We are daily perceiving a fuller application of the looking to the relations of man to his surroundings in the prevention of disease. The future of medicine lies open to this direction, and it is in this field that its great victories are to be gained.

We shall accomplish far more in preventing the occurrence of disease, in our communities, than in curing it in individuals. Indeed, we already see it in the decreasing mortality rates, in some of our large cities, in comparing the death rate of to-day with that of even half a century since. It may be thought that the prospect is too cheering, that I assume too much of future successes for the science of medicine. It may be urged that from the commencement of man's history he has yielded to his passions, and, as a result, has developed new forms and complications of disease, and what has been done in the past must be repeated in the future, as long as his nature remains the same. That if all disease were to be swept from the face of the earth, man would reproduce it almost immediately by his injudicious acts. Truly would such be the case, if no change were made in the training and constitution of man. But it is not too much to hope that, from the medical science of the future, there shall emanate influences which shall steadily modify the conduct of man's life, by entering that province which heretofore has been left to the philosopher and the theologian. Not that medicine is to trespass within the domain, which should

be properly occupied otherwise, but by so educating man as to the bearing of his nature and relations that may he act with more wisdom. As we admit that, in nature, a process of evolution has gone on and is ever progressing, so with man, who is but a part of nature, we must admit that a similar evolution has been and is going on. We must then study man as we study nature.

We must look back over the historical evolution of the race, and search out how he has gradually grown to the capacity of the present. In such a study, we learn that the highest development of the intellect, the fullest manifestations of his faculties have been matters of growth and gradual evolution, and not the result of an implantation fully formed and expanded. That they have been slowly won as the victories of prolonged struggles and experiences. It is for us then to find out, by exact study, the laws which have been at work in the past, and by careful method apply them, with intelligent purpose, for the future higher development of the race. One of our most earnest efforts should be to impress upon our communities the power which man has over his own destiny, to pronounce his own condition as one of health or disease.

I have referred to the increasing complexity of forms of physical and mental disease, which have appeared with the development of civilization, and their threatening aspect. It is to meet this evil that I have urged the necessity for a deeper and more careful study of man's relations to his surroundings. We know that excessive use of any organ or part of the body induces special forms of disease. The same law holds in regard to the nervous system. Within certain limits, use and work develop growth and endurance; but, beyond this, injury must ensue. The capacity for intense and sustained work has not increased co-equally with the demands made for it, by the greatly developed complexity of the phases of our civilization. Look at it from what point of view we choose, the conclusion is inevitably forced upon us, that the amount and variety of nervous disease has largely increased. While physical causes of disease have been so carefully studied, that we have gained much in our power over the once destructive epidemics which swept with such fatal fury over whole nations;

over the increase and development of mental disease we have achieved less power.

The causes of mental disease are less tangible and less easily recognized than those of physical disease; for them we must search through the *social* structure. As the profession of medicine becomes more scientific, and thus more thoroughly the educator of the masses, our communities will learn that all impurity, (physical, moral or intellectual,) is a deadly element; that man cannot violate physical, moral or intellectual law without injury to health or life. That ignorance or disregard of the laws governing moral and intellectual health are as certainly visited by a penalty as in the violation of the laws of physical health.

The importance of Heredity in the production of disease must not only be more deeply studied by the profession, but impressed upon the people as a part of their duty in the conduct of life. They must be taught that the mental constitutions of the parents, subject to the immense strain of modern social life, are transmitted in all their imperfections to their off-spring; and that the increase of mental disorders, of every kind, is, in a large measure, due to ignorance and a gross neglect of the laws of hereditary transmission. The increase in the forms of insanity, during the past half century, has been largely due to the two causes: excessive mental strain and hereditary transmission. We learn thus, that the medical profession must become the guardian of the mental and intellectual, as well as of the physical, health of society. It will take the child at birth and make up his life prospects from the past and present of its family history, and its actual surroundings.

Here you will meet one of the most difficult parts of your task as public educators. You will, again and again, be disappointed and foiled by the slight interest and responsibility felt by the community in the power they possess, in controlling their physical and mental diseases. While, in the selection and propagation of their domestic animals, they exercise the greatest care, they fail to apply the same laws to their own species. While we strive to impress this all-important truth upon our people, we must, at the same time, labor to develop a greater certainty and accuracy in our knowledge of the laws of transmission, that we may be enabled

to command their attention and respect, by the exactness of our knowledge, in the certainty of our predictions. It is one of the most urgent duties of medical study to develop these laws of heredity, and apply them to the improvement of the race physically, morally and intellectually.

Nor is the law of heredity of interest to the medical profession alone. The political economist realizes the importance and value of health to the State. He recognizes the extensive influence and bearing which this law exerts, in the production of pauperism and disease. He finds, among our public institutions for the care of our pauper insane, that from the effects of hereditary transmission, pauperism is handed down as a *legacy* from generation to generation. It is a startling fact to observe, that, in some of our county almshouses, two and even three generations of the same family exist as inmates, laboring under physical or mental disease directly traced to transmission.

With these patent and growing evils before us, existing in society, the responsibility of the medical profession is apparent. To search out their causes, to learn the laws of their growth, becomes the urgent duty of every student of our science, for from it must come the remedy.

These, briefly presented, are some of the questions in medical science which the future must develop and explain. And you, who are to be identified with the science of the future, cannot too earnestly turn your attention and thought in these directions. But, aside from these suggestions, as to the character of your work and its province, there are other considerations, bearing upon your individual relation to your profession and to society, which will largely determine your success.

These are found in the influence which the college exerts in its training of the scholar. The forms of error, the theories of life, the problems of society, are ever changing. It is, and has ever been, the province of the University to gather and investigate the causes and tendencies of these questions in man's evolution, and to treasure up and preserve all that is of value in the recorded experiences of the past.

You have been largely under these influence, and your training

has been shaped by the lines of thought and opinion which the University has established. I have said that the influence of the college is a power in society. That power has its origin in the conservatism of learning. Conservatism enters into the very idea of the university. Its learning is largely traditionary. Its inspiration is drawn from the examples of the past. The traditions of learning are the conceptions, which broad and comprehensive minds have formed, of the relations of life. The scholar is not the advocate of conservatism for its own sake ; but his is conservative because his views come to him from the past. He views the relations of things in the present, through the medium of the sagacious minds of the past. Conservatism necessarily inspires caution. This is the conservatism which is the outgrowth of learning, and the power, of the scholar of to-day, is largely due to the conservative character of his study and discipline. At no time has the tendency toward liberality of thought been more marked than at the present. Old and time-honored theories have faded from view. Opinions which have been tenaciously held and accepted, with the zeal of a blind faith, have been rudely questioned and tested by rigid and searching analysis. The announcement of a fact in science, or in any department of learning, is immediately met with a searching question as to its truth. So vigorous, bold and iconoclastic has this habit of thought proved, that a broad skepticism has seemed imminent.

But, as threatening as it may have seemed, we may be content to trust to the educated men of the time to meet the evil, to sift the true from the false, and to establish truth more firmly from the very struggle necessary to maintain it. It is the scholar, with his conservative culture, who is to meet and overcome the evil. It is his culture, which has imbued him with right views of human relations, that will enable him to prove himself the safe and trusty guide. It is not alone the intellectual discipline, not alone the careful training which he may undergo, in various departments of learning, which will give him this capacity. The *whole* man must be cared for. The sentiments, the tastes, and the philosophic spirit must be cultivated. And this brings me to speak of the *character* of the culture demanded of the scholar of to-day.

Above and beyond special professional training, there is such a thing as culture and enlargement. The man must be *more* than his trade. It is necessary to every man to throw himself, with vigor, into some profession or pursuit. But there is something more ennobling, and which must ever be kept in sight, if you would prove yourselves more than useful instruments or machines. The professional man who, over and above his daily duties and business relations, has learned to feel that he has other relations, far-reaching and more permanent with his fellow-beings in all ages—that he is a debtor to a wider circle of things than the immediate circumstances of his environment, is on that account none the worse workman, and must certainly be a nobler type of man.

Culture is not the product of study alone. Learning may be acquired from books, but not so culture. It is a mere living process. It requires of the student that he close his books, go out from his closet, and mingle with his fellow men. The intercourse with living hearts must supplement his association with dead books. Man is not all intellect. He feels as well as thinks. The sublime and beautiful appeal to him as surely as the true. The moral and emotional nature cannot be separated from the intellectual. The emotions are the motive power which push the intellect into action. The ideal of culture, then, which I would have you ever keep before you, is that which comprehends the full and symmetrical development of the whole man. Your lives and character will be determined mainly by your ideal.

This ideal, whatever it may be, fusing itself into the man, acting as his source of inspiration, forms his true and essential nature and reveals itself in all his thoughts and acts. We are told, and truly, that it is not the educated alone who have their ideals—that every man, even the most ignorant, has an ideal, whether he be aware of it or not; that is, that every man has something which is the ruling thought of his life. Even the beggar in his rags has his ideal, though it be only sufficient to eat, drink and to clothe himself. The ideal may be material or spiritual. The kind and measure of each man's gifts with culture must determine its character. If then it be true that every man has his ideal how important is its character in determining his success. Our culture

then must include with its high ideal a practical training of the hand and heart; and this training must be continuous and severe, for it is only through long and earnest discipline that the ideal may be reached, through and over the obstacles which surround its attainment.

The tendency in study and observation at the present time is largely toward *specialty*. And of the dangers here to be met I would warn you. There is a fashion in thought as well as in dress. Exclusive study, early in the life of the scholar, begets one-sidedness and flippancy. The limited knowledge, of the immature mind, begets self-sufficiency and a lessened power of broadly appreciating the relations of the subjects of observation. It is an unfailing law of our nature, which will vindicate itself, that in the exclusive devotion to one cause or one principle, the character loses its balance and steadiness, and falls from weakness and gradual decay.

And what is true of the individual is also true of nations. The Greeks were the most imaginative of people. Taste was cultivated as the supreme guide. It was the *beautiful* at which they ever aimed. And in their history our law is verified. The exclusive devotion to one view of life led to their decay. How great the contrast formed by the Romans! Their devotion was toward organization, and *law* was their contribution to the world. Yet their exclusive devotion to one principle unbalanced by others, made them weak, and ultimately led to their decline.

Guard well then against the allurements of too early specialization in study, that the proportion and harmony of your culture may be preserved.

I have referred to the excellence of the training to which you have been subject, in the application of scientific method to observation. But here I would urge one word of caution. The various departments of science are but arbitrary divisions. Nature is not thus divided. Her complexity has compelled us to adopt such departments of observation for our convenience, not because they exist in her domain. Yes, I would urge you to follow your science from a desire to carry, into all your relations, its modes of analysis and study. Nature is one and continuous, and the modes of study in one part are applicable to others.

The fact, that science has required this, has developed a spirit very hostile to it; because, in applying to the development of man, physically and morally, the processes of investigation, applied to other parts of nature, it seemed to pull him down from the position which he had unwarrantably assumed.

We need have no fear if advancing knowledge and greater light show the error of long accepted theories. We may rest assured that the *truth* in them will live; it *must* be eternal.

And this leads me to refer to the fact, that science has given cause for offence, in demanding that the processes of observation, which it follows, should be applied to other departments of study. In a field in which metaphysical study only has been followed, physiological observations cannot be introduced, without rudely jarring some long accepted theory. If we find that nature's laws do not sustain the long venerated opinion, let us not, in a spirit of vandalism, enter upon a career of destruction; but, with the true conservation of the scholar, let the work be pursued calmly and charitably. The suspicious attitude of society, toward science, calls for nothing more than a dignified demonstration of the facts which it announces. The student of science should be content to remain within his own domain of fact and observation. It can be no satisfaction, to the earnest scholar, to hasten the decay of long venerated beliefs and doctrines. It matters not that they may fail to accord with the facts of recent observation.

They have, from time immemorial, served as an unfailing support in the moral evolution of the race, and for this reason, if for no other, should be kindly dealt with. The real object, of the scientific observer, is the elevation of mankind to a higher life. There are other laborers earnestly striving, in other fields, to attain the same end. While science strives for the elevation of the *intellect*, other influences must develop the *emotional* or *æsthetic* part. And he who strives in this other and less brilliant sphere, struggling with doubts and fears, perhaps in obscurity and privation, is none the less honorable than he who wins the plaudits of the world, by his brilliant labors and achievements, in the field of demonstrable fact. Indeed, science is independent upon these very laborers, for co-operation in its own work in elevating man. Its plain, and

sometimes uninviting, truths, accepted by the philosopher and theologian, and clothed by them with an æsthetic beauty and attraction, will often be more eagerly accepted than if presented as a mathematical proposition, appealing to the head and ignoring the heart.

In the development of the mental and intellectual, do not lose sight of the moral. The close study of science need not lead to materialism. The careful study of the development of the works of creation should not lessen, but rather strengthen, the belief in a creator. No matter how deeply we may push our studies into the evolution of nature, there is ever *something beyond*, a vast, omniscient power, in the contemplation of which man's littleness and feebleness compels him to look upward and say **THERE IS A GOD!**

You have chosen a profession, which, absorbing in its interest and ennobling in its study and pursuit, is not attended with great pecuniary reward. If your choice has been made from proper motives, you will have no cause for regret. It cannot be undertaken from ambitious impulses, or pecuniary considerations. Instead of proving ennobling, it must, if these considerations enter as a motive, prove demoralizing in the extreme. If the choice be made from an earnest desire to improve man's condition, and to develop truth, the fullest satisfaction and amplest scope are attained.

You are now to change your life of quiet study for one of action. Those who have followed you with interest heretofore, and sought for promise of capacity, will now look for the fulfillment of their hopes in an exhibition, in the future, of a persevering and manly use of what capacity each of you may possess.

The character of the training and study, to which you have been subject, has been such as to bring you directly into contact with the facts of nature. Nature's laws are learned by direct study and observation. Commencing with the simplest, it rises to the more complex, following thus, the law of development or evolution. You will thus keep constantly in mind the unity or continuity of nature. Man is but a part of nature, and must be studied with it. He cannot be studied apart from his relations to it.

Your advantages have exceeded those who have, even lately, preceded you. The scientific thought, the literary culture and the recorded experience of the past have been placed at your disposal. Your studies have enabled you to attain, in a day, to knowledge which has only been reached by centuries of unremitting labor and of repeated disappointment. Critical study has gained for you what has proved a painful failure, in the experience of many great minds in the past. It is for you then to show, by your future career, whether the labor spent in your training and the great advantages offered you have been in vain. I trust that you enter upon your work, with a due appreciation of your responsibility to your profession and society.

The career before you is clothed in uncertainty. For him, who shall show himself capable and trustworthy, society has a place; and success awaits. For others, who may prove unfaithful or incapable, a life of disappointment and obscurity lies before. The *law of natural selection* will be applied to you. The *survival of the fittest* will as surely prove the law for you, as it does in the organic world in the struggle for existence.

Ever aim at the practicable and possible. Do not allow an inordinate ambition to lead you beyond the limits of reason, but strive to keep within the bounds of a laudable zeal. Avoid extremes. The teaching to which you have been subject has been all in this direction. While the effort has been to encourage you to keep abreast with the spirit of the times, to investigate and observe, yet the effort of the college, in its instruction, has been to impress you with the importance of testing all facts presented with the touch-stone of truth. This is the influence which you are to carry forth with you to your labor among men. With *truth* as the test you will have an unfailing means of deciding the value of the phenomena which you may observe.

The legitimate goal of all human study is the endowment of human life with new riches, new beauties, new inventions, whether in science, religion or law. Seek then to add something to knowledge in original work. Be not satisfied with gleaning from the observations of others, but follow out lines of thought and investigation, from which you may gather some facts to add to the sum

of general knowledge. Strive to be producers as well as consumers, that you may at least keep perfect the equilibrium between production and consumption.

Ever aim to profit by your own experience. The habit of recording your observations, and submitting them to the criticism and judgment of your associates, will beget habits of critical study and analysis. You will thus take care, that your mistakes prove the most valuable sources of information. They are the most expensive of teachers, but their lessons, if rightly learned, are never forgotten. Above all, seek to maintain courteous relations with your professional brethren. The ethics of the medical profession are based upon the noblest characteristics of manhood, and cannot be too carefully studied. These principles must be borne out by a strict personal morality, which the peculiar relation of the physician to the community demands. Courage of the highest type will be required of you, to practice under the severest temptations, and yet, when misjudged, to patiently wait for the verdict which certainly comes to honesty and integrity of action.

The goal, to which you look forward hopefully, is *success*. It is a word of vast signification. It is far-reaching and enters into the very essence of your life history, temporally and spiritually. Study well its relations and comprehensiveness.

One of the elements in success is in the choice of location. It should be made with care, and when once made should be final. It is for you, then, to bend all your energies to become master of the situation. Study closely into all its characteristics and surroundings. Make a thorough sanitary survey of your territory, that you may know, as far as practicable, all the influences which may bear upon the health of the community in which you may live. Be content and willing to pay attention to little things. Never forget that the necessity for success is almost always largely in the way of patient toil and drudgery. It is not alone the great achievements which insure success, but it depends on doing *well* even the most trivial duties.

Young men are ambitious, and, at times, led to undertake too much. Ever learn to measure well your strength before assuming a burden; but having once taken it up, do not lay it down; and

the habit of success will strengthen your confidence in your own powers, while it at the same time develops them.

Success, to be real, must be enduring. Notoriety is not success. The attainment of honor, wealth or power alone, is not success. It involves something more. These are but the means to achieve that fulness of life which alone constitutes success. They are to be used for the promotion of the well-being of mankind, the elevation of the race and the development in their possessor of a nobler spirit of, humanity and self-sacrifice.

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ART. II.—*The Hip Joint.* By E. R. BARNES, M. D. Read before the Buffalo Medical Association.

[I must apologise for presenting a paper which is purely elementary in character. I have not attempted to advance anything new or original but only what is generally accepted by authorities. I have not attempted to instruct, but only to review, and while this may be tedious to those who have given much attention to surgical subjects, yet to the general practitioner, who is liable to be summoned in cases of hip injury, such a review may not be objectionable. I have reason to believe this is true, and for this reason, together with the interest recently excited on this subject and the variety of opinions expressed thereon, I venture to begin at the bottom, even if I do not get very near the top.]

The bones and parts of bones concerned in the formation of the hip joint, or of immediate interest in connection with lesions of the same are broadly, the os-innominatum and the os-femoris. The parts thereof of interest as aforesaid are—of the os-innominatum—the acetabulum, the dorsum illii above, the greater and lesser sacro-sciatic notches posteriorly, the body of the pubic bone in front, and below the obturator foramen, bounded as it is by the ischium, and its ramus and the pubic bone and its ramus.

The acetabulum is a hemispherical depression, formed at their points of junction, from portions of the three bones into which originally the os-innominatum was divided. It is surrounded by an irregular rim, strongest above, which is about two inches in diameter, and which makes the greatest depth of the contained cavity about three-fourths of an inch. This rim is continuous, except where it is interrupted by the cotyloid notch, which opens downwards, and a little forwards towards the thyroid foramen. The inclined position of the acetabulum insures firm support to a body entering it in the direction of the os-femoris.

The acetabulum is lined with an articular cartilage except at the attachment of the ligamentum teres, which cartilage extends be-

yond the rim of the acetabulum about one-quarter of an inch or more, increasing the depth of the cavity by that amount. This extension of the acetabular cartilage is called the cotyloid ligament, because it is rendered very strong by containing within its substance an interlacing network of strong compact fibrous tissue, which is firmly attached to the bony rim. It is inclined inwards, so that at its narrow edge the acetabulum is narrowed, and embraces the cartilaginous head of the femur. It surrounds the acetabulum, except where it becomes continuous with the strong transverse ligament which bridges the cotyloid notch, and completes the continuity and symmetry of the acetabular cavity. It is, like the acetabular rim, much thicker and stronger above than elsewhere.

The parts of the os femoris which are of interest in this connection are the head, the neck, and the upper part of the shaft, including the greater and lesser trochanters, connected by the greater and lesser intertrochanteric lines. These parts consist of cancellated tissue, covered by a layer of compact tissue, of greater or less thickness, according to situation. The head, which is somewhat more than a hemisphere, is covered by articular cartilage, and is supported by the neck, which passes obliquely downwards, until it abuts against and is incorporated into the shaft. The base of the neck is determined or bounded by the intertrochanteric lines, and by the trochanters major and minor, and is very much thicker from above downwards, though not from before backwards, than at the attachment of the neck to the head. The under-surface of the neck approaches the shaft in the form of an arch. The compact tissue forming this under-surface is everywhere, for obvious reasons, very much thicker than that of the upper surface. It is thinnest where it is attached to the head, and grows progressive thicker until it is incorporated into the compact tissue of the shaft. The anterior and posterior compact tissue coverings of the neck are of about equal thickness above, but as we approach the lower surface, where the anterior wall is much the thicker of the two, the posterior wall becomes thinner, until it is reduced almost to the thinness of paper at its insertion into the posterior intertrochanteric line.

As to the internal construction of these parts, it is only neces-

sary to call attention to the arrangement of the cancelli, so as best to receive the weight, and transmit it by means of direct lines, or pillars, or braces and stringers, to the support of arches to have a fine instance of the mechanism of nature. Dr. Bigelow has pointed out an interesting fact as to this cancellous structure. It is that the posterior inferior wall of the neck is prolonged into the cancellous structure, beneath the posterior intertrochanteric ridge, constituting what he calls the true neck, while the external paper-like shell, curving outwards to join the ridge, cannot be considered the main structure. To the fact of this conformation he attributes much importance in connection with some of the phenomena of impacted fracture of the neck.

The ligaments of interest are the greater and lesser sacro-sciatic ligaments, forming the foramina of the corresponding names; the ligamentum teres, whose function it is to limit rotation outwards, and to check adduction when the limb is flexed, but which is sometimes rudimentary or even absent altogether; the ilio femoral ligament, passing fan-shaped from the anterior inferior spine of the ilium to the anterior intertrochanteric line, divided as it is essentially into two powerful fasciculi which are inserted into the opposite extremities of the anterior line, whose agency, as shown by Bigelow, who calls it the Y ligament, is more important in controlling the phenomena of dislocation than that of any other ligament or of any muscle, and it might perhaps be said than that of all others combined; and lastly, the capsular ligament, originating from the margin of the acetabulum external to the cotyloid ligament, surrounding the neck at its base anteriorly, but varying in its insertion posteriorly, being generally said to be inserted here at the middle of the neck. It is much thicker above and in front than elsewhere. The inner layer of the capsular ligament, reflected, becomes the capsule, or rather the periosteum surrounding the neck within the joint.

If we now lay open an imaginary capsular ligament, we expose an extensive cavity lined with synovial membrane, which, commencing at the head of the femur, covers the neck as far as the insertion of the capsular ligament, on to the internal surface of which it is reflected; thence, passing over the external surface

of the cotyloid ligament, it dips into the acetabulum, and, covering the ligamentum teres, reaches again the head of the bone whence it started, so to speak. This synovial membrane or sac does not extend as far outwards as would appear from the external insertion of the capsular ligament in front, owing to the great thickness of the latter anteriorly and above, and the difference in points of insertion between its superficial and deep layers. That portion of the neck only which is included in the synovial sac, is regarded as intra-capsular; hence a fracture of the neck may be wholly within the capsule, without being wholly intra-capsular in a surgical sense. This point is of importance in connection with the question of bony union after intra-capsular fracture.

As to the muscles it is only necessary to say that numerous and powerful muscles surround and are connected with the bony structure in this region, aiding to maintain their proper relations, controlling movements in a normal state, and influencing abnormal phenomena. To refer to these in detail would consume too much space, of which I have already taken too much under this head. I will only call attention to the obturator internus, which, passing out of the pelvis by the lesser sacro-sciatic notch, is inserted into the upper portion of the great trochanter posteriorly. Its structure is such as to render it very strong, and Bigelow has shown that it has important relations to fracture of the neck, but especially to dislocation.

Passing now to the subject of fracture of the neck of the femur, I would state that the head, covered with its cartilage, fits so exactly into the cotyloid cavity that atmospheric pressure is stated by Holmes to be one of the agencies in retaining it in place. There is no room for yielding. The natural mode of providing against shock to the joint structures, is by the transmission of force through angles, as that between the foot and leg at the ankle, between the leg and thigh at the knee, and between the thigh and body at the hip joint. A fall upon the foot in the erect position, with muscles rigid, may readily injure the joint structures. So in general it may be said that it does not require a strain, or blow, or shock, of the greatest severity to fracture the neck of the femur, provided the force acts without the intervention of angles, with the

elasticity afforded by muscular support. In accordance with this principle, fracture of the neck of the femur is generally caused by a fall upon the foot as stated, or upon the knee, or upon the region of the great trochanter.

The liability to this accident increases with age. Dupuytren says he never saw a fracture of the neck of the femur in a child. Among the earliest cases recorded is one by Sabatier, in a child of fifteen years. Hamilton says this is the earliest case he has seen recorded. Before fifty years of age fracture of the neck is comparatively rare in a healthy subject, except as the result of a violent blow upon the great trochanter, as in the case of a person falling from a height. After fifty the liability increases in proportion to age, so that beyond sixty years progressively, a very slight cause will produce fracture of the neck. The ease with which this occurs, is due to the changes in nutrition, senile atrophy and sometimes fatty degeneration of the neck, which occur in advanced life, and not to the relative increase of the earthy material of the bone, as is sometimes stated, which Mr. Barnsby Cooper has shown, is on the contrary diminished in the neck, although increased in the shafts of the ~~same~~ specimens.

The relative frequency of extra and intra-capsular fractures is not determined, but it may be said in general that before fifty the presumption is all in favor of an extra capsular fracture, and that afterwards progressively with age, more especially after sixty years, the presumption is in favor of an intra-capsular fraction; meaning here a fracture wholly within the capsule, or partly within and partly without the capsule. If a man over sixty years old receives a slight fall, the presumption is in favor of an intra-capsular fracture as against an extra capsular or a dislocation. The exception to this statement is, when a severe, direct blow is received on the outer side of the great trochanter.

M. Rodet, by experiments, claims that one may tell the the situation and direction of this fracture by a knowledge of the direction in which the force has acted. As his conclusions seem to be accepted as in the main correct by the highest authorities, they may be thus stated: When a person has fallen upon the foot or knee, the force, acting vertically, will produce an oblique intra-cap-

sular fracture. When the blow is upon the front of the trochanter the force, acting from before backwards, produces a transverse intra-capsular fracture. When the back of the trochanter is struck the force, acting from behind forwards, will produce a fracture partly within and partly without the capsule ; while if the force act transversely, *i. e.*, fairly against the outer side of the trochanter, the fracture will be wholly extra capsular. It may be added that extra capsular fracture is generally produced by greater force than intra-capsular.

These points are of accessory value in the diagnosis. A distinction cannot always be made between all the different forms of fracture by the symptoms, and by manipulation, which must be guarded. Yet a diagnosis is important in enabling us to make a prognosis, for it may be said that an extra capsular fracture, under favorable circumstances, will generally unite by bone ; a fracture partly within and partly without the capsule may often unite by bone, while it has not been proven that bony union of a wholly intra-capsular fracture is anything but phenomenal, if it has been proven to take place at all. The difficulty of proving the existence of bony union in intra-capsular fracture, from the specimens purporting to be examples of such union, consists mainly in the impossibility of establishing the location of the original fracture, absorption having removed more or less of the fragments of the neck, and caused the insertion of the capsule to recede from its normal position, before union took place, thus failing to show anything but an extra capsular union of an intra-capsular fracture, as pointed out by Dr. George K. Smith, in his valuable monograph on the insertion of the capsular ligament of the hip joint, and its relations to bony union in intra-capsular fracture. A diagnosis will also aid in the treatment, as to time of continuance in bed, extension, &c.

Fractures of the neck vary greatly in degree. Partial fractures are recognized from specimens, as existing : also, intra-capsular fractures of the neck, without laceration of the periosteum : and this is one of the conditions in which Sir Astley Cooper claims bony union to be possible. These conditions could not be recognized as such during life. But fractures of the neck are generally

complete, and may occur at any part of the neck. The strong capsular ligament is not usually ruptured at first, or but slightly so. The periosteum of the neck is generally ruptured, and the fragments of the neck more or less displaced.

Intra-capsular fractures may be impacted, but I think this is rather the exception. Extra capsular fractions are said to be always impacted. In this latter class of fractures, the neck, usually the posterior portion of it, is driven into the cancellated tissue of the shaft, often splitting off one of the trochanters, or, with greater force, more extensively comminuting the bone. In the latter case impaction may be immediately liberated. Impaction may also be liberated in other ways.

The mode of union of these fractures is by ligament, or bone, or no union of any kind may occur. Ligamentous, or fibrous union, may be so close as to require maceration to distinguish it from bony union; or the ligaments may be long and allow a play of the fragments upon each other. Where bony union takes place there is generally more or less absorption of the neck. Where no union whatever takes place, absorption of the neck also occurs, and the weight of the body is sustained by the ligaments and muscles connected with the joint. Bigelow presents a specimen which had been a case of old ununited fracture of the neck, in a subject whose weight in walking had been sustained chiefly between the outer branch of the Y ligament in front, and the obturator internus behind. This, he states, is probably the usual condition of patients after this injury, where the shaft of the femur moves freely upon the detached head of the bone.

I will now refer to some of the symptoms attending fracture of the neck. First—Deformity. In a recent intra-capsular fracture there may be an increased prominence of the hips from the presence of effusion, or from the position of the bones, or this symptom may be wanting, or there may even be a slight depression on that side. In extra capsular fracture there is usually less prominence than on the uninjured side. When there is much impaction this is very apparent. Secondly—Rotation. In impacted fracture the trochanter rotates through an arc of a circle of which the head of the bone is the center. In detached fracture it rotates on the axis of the shaft. Thirdly—Crepitus. This is often not attainable,

because the fragments are not in apposition and cannot be brought into a normal relation, or when in such relation, the serrated edges of the neck may cause the acetabular fragment to move with it, or because a portion of torn ligament may be interposed between the fragments, or because there is impaction, which it is important not to disturb. Fourthly—Loss of power over the limb. The patient, in a recumbent position, cannot lift the limb by a voluntary effort, although there is no resistance to any motion of the limb by the surgeon, except from the effort of the patient to avoid pain from motion. There is unrestricted mobility under chloroform. Nevertheless, if the capsular ligament remains entire, or if there is firm impaction, the patient may walk some distance after the injury, at least with assistance. There is often semi-flexion of the knee, in recent intra-capsular practice. Fifthly—Pain and tenderness at the seat of injury. Sixthly—Eversion and shortening. I mention these together because they are sometimes due to the same cause, sometimes not. Where there is no impaction, shortening is due to muscular contraction. This shortening may be at first greatly limited by the untorn reflexion of the capsular ligament, or by the latter itself, to a less degree, but the shortening subsequently becomes greater, by the yielding of these structures, or, if bony union ultimately takes place, by the absorption of the neck. Eversion takes place in unimpacted fracture simply because that is the natural position of the limb when left to itself. The agency of the external rotators in producing eversion is greatly lessened by the destruction of their centre of motion by the fracture of the neck of the femur. Their action is more directly backwards than rotatory, as suggested by Erichsen.

In impacted fracture, eversion takes place in consequence of the posterior wall of the neck being the part impacted, and the shortening is caused by the depression of the head, which results from the peculiar mode of this impaction. Bearing in mind Bigelow's description of the posterior wall of the neck, referred to in the earlier part of this paper, I quote from him on this point: "In impacted fracture, the thin posterior wall is alone impacted, while the thick anterior wall, refusing to be driven in, yields only as a hinge, upon which the shaft rotates to allow

the posterior impaction. . . . The hinge before alluded to is oblique, following the anterior intertrochanteric line. Were it vertical, by bending this hinge we would produce rotation without shortening. On the other hand if it were horizontal and transverse, bending it would produce shortening without rotation. But as it stands at an angle of 45° , the shaft rotating upon this broken interval is shortened in proportion to its rotation—or what is the same thing the neck is reflected upon its hinge downwards and backwards, till its axis, normally oblique, may become even transverse, with great outward rotation of the shaft, and a shortening of perhaps two inches. This is probably the most common cause of shortening, though the head of the bone may be otherwise depressed." Slight impaction will produce slight eversion and shortening.

When there is no eversion, and even, rarely, inversion, the neck may be driven by great force directly into the cancellous tissue of the shaft with much splitting and comminution of the shaft, and the neck is variously depressed and shortened. By this injury the limb may be shortened three inches.

In recent unimpacted fracture the limb can readily be brought down to its normal length, which of course cannot be done in impacted fracture. Measurements are taken by a comparison of the distance between the anterior superior spinous process of the ilium and the malleolus of the injured side with that on the opposite side to ascertain the existence and degree of shortening. Then, from the great trochanters to the inner condyles, or the lower borders of the patellæ; then from the patellæ to the inner malleoli, to ascertain that the shortening is neither in the thigh or leg. In marked shortening the great trochanter of the injured side is nearer the anterior superior spine of the ilium than on the other side. I believe that careful measurements will show that it is also often nearer the median line posteriorly. Careful measurements of cases of old fracture of the neck with about two inches shortening, which I have recently made in the presence and with the aid of others, form the basis for this statement. This nearing both points could be caused by the shortening of the neck, and by the approximation of the lower angle of the triangle, which is formed between

the three points indicated, to the two other angles, as is done by the moving upwards of the great trochanter. It can be shown also by triangles that the tilting of the pelvis does not perceptibly affect the relative measurements of the two limbs.

When a person with marked shortening from fracture of the neck is in a sitting posture, the projecting trochanter can be most readily felt by the hand, and it sometimes seems to be nearer the seat than the other.

In respect to treatment, perhaps the broad division made by Bigelow is the best, viz: into "impacted fractures of the base of the neck and unimpacted fracture of the rest of the neck, without regard to the capsule, a practical classification, embracing a majority of cases, and to which the other lesions may be regarded as exceptional." Bearing this in mind, and not failing to apply what knowledge we possess, as to the modes and probabilities of union, in the different conditions influencing this fracture, and we have our guide to treatment. Thus impacted extra capsular fracture requires immobility without extension. The remaining fractures in general require extension to approximate fragments, and immobility. Various appliances are used to attain these ends. In old and infirm persons too prolonged an attempt must not be made to procure union. In some cases even the patient must be relieved as soon as possible from confinement to bed without any attempt to secure union.

My paper has become so long that I have been unable to refer to any other lesions.

—X—

MISCELLANEOUS.

St. Francis' Hospital—Accidental Loss of Drainage-Tubes in Pleural Cavity—Successful Removal by Operation.

Report of Dr. JAMES H. BOWEN. Reported by CHARLES F. SULLIVAN, M. D., Assistant House Physician.

Edward Dorsey, 21, single, Irish, roach-spinner, was admitted January 11th, with the following history: A year ago last November was attacked with pneumonia of the left side, which was treated without avail by counter-indications, and in the following

April 3xxxi. of clear serum were removed by aspiration. After the lapse of six weeks the effusion was found to be purulent, and an incision was made at the junction of the axillary line and seventh intercostal space, 3xxvi. of creamy pus being evacuated, and the wound allowed to heal. In July the incision was renewed and nearly 3l. removed; a drainage-tube inserted, slipped into the patient's pleural cavity the ensuing night. The wound has been draining steadily ever since, but last Christmas he was so unfortunate as to lose another tube in a similar manner, and he entered this hospital January 11th, for relief, his attending surgeon having previously attempted their removal without success. On admission, the patient is well nourished, and complains only of occasional pain in the seventh intercostal space, radiating towards the sternum.

The left side of the chest measures two and a half inches less than the right in the xiphoid line, and possesses greatly diminished lateral expansion, with partial effacement of the intercostal spaces by approximation of the ribs. Vocal fremitus on the affected side increased in the mammary, and absent in the infraclavicular and axillary regions. Extra resonance on percussion in the infraclavicular region, while in the axillary region there is dulness, which inferiorly becomes flatness, the mammary and infra-mammary regions being slightly extra-resonant.

Auscultation reveals very feeble respiration *anteriorly*, with absence of the respiratory murmur over the lower fourth, together with an occasional sticky friction sound. *Posteriorly* in the upper half the respiration is prolonged, with absence of respiratory sound over the lower half and metallic tinkle.

January 18th.—It was decided to operate for the removal of the tubes, and accordingly an incision was made by Dr. Ripley in the seventh intercostal space, beginning at a point six and a half inches from the medial line and extending posteriorly a distance of four inches. The seventh and eighth ribs were so closely approximated that, at the point where the drainage-tube had been in constant contact with them, a portion of each had necrosed, and it was found necessary to excise a portion of the eighth rib before the proper instruments could be introduced into the pleural cavity. An angular fracture was also found on the seventh rib superiorly, possibly caused by an attempt to force the ribs apart in the operation he sustained before admission. The pleural cavity having been entered after the removal of the dead fragments of bone, its interior was carefully explored by means of uterine forceps, and an Emmet's silver probe so bent at the extremity as to form a hook, and yet so flexible as to offer but little danger of perforating the lung.

After repeated and cautious attempts, the two tubes were found about an inch apart, lying posterior and superior to the incision. The first was found and removed by the forceps, the second by the

probe; both being constructed of the material ordinarily used for gum-elastic catheters. The tube retained in the chest since last July measured seven inches in length, was about the diameter of a large goose-quill, and somewhat blackened, although but very slightly absorbed, by the fluids in the chest. The other tube measured six inches in length and appeared very bright and fresh. The numerous adhesions and thick layers of fibrine contained in the sack rendered the operation quite difficult. The patient was placed in bed and $\frac{1}{4}$ gr. morphine injected hypodermically every two hours until midnight, after which he slumbered easily until morning. The next day the temperature did not obtain more than 100° F., and the highest point reached the second day was 100.5° F. in the rectum, since which time it has not exceeded 100° . On the 23d, a drainage-tube was inserted in the lower portion of the incision, the upper having united by first intention, and the patient has since been doing well, the amount of discharge daily diminishing.—*Med. Record.*

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ADAMS STATION, TENN., Feb. 8, 1877.

Dr. E. S. Gaillard:

DEAR SIR,—I was called on the morning of the 6th of August last, at 5 o'clock A. M., to see a negro boy, five miles distant, aged nine years. The father came for me, and informed me that his son had jumped down from a high rail fence upon a lot of loose boards and stuck a nail in his heel, but pulled it out without breaking it off in his foot. The accident happened on Friday, and I saw him on Monday morning. His mother informed me that at supper time the night before he complained of feeling badly. He eat his supper, but soon threw it up, and complained of his back, head, and stomach, and also said his heel hurt him. As is usual with the negro, the parents were "sleepy-headed," and went to sleep, and about midnight he commenced making a very strange noise. After lighting a lamp, the boy called for a drink of water, and when put to his mouth it threw him into a severe paroxysm. They became much alarmed. The paroxysm did not last a great while, and the patient begged his mother again for water, with the same effect. From the information gained from his mother, I suppose he must have had a dozen paroxysms before I arrived.

Upon examination, I found his heel had not much swollen, presenting the appearance of what is commonly called a stone-bruise. It had been well poulticed. I made a free crucial incision. It did not seem to give him much pain. He was entirely rational during the intervals intervening the paroxysms. There was but little pus in his heel. His heel had been "picked up" so by his mother that I could not discover the track of the nail. His contortions and

gyrations being so peculiar that my doubts arose as to it being a case of tetanus, and I began to experiment to see if I could get up a case of hydrophobia. I found that the slightest puff of my breath would produce a hideous paroxysm. He presented the appearance of trying to "grin out of his hide." I tried him water with the same effect. I cauterized his split heel freely with carbolic acid. He did not complain. I then endeavored to chloroform my patient, but as soon as I would place the napkin over his face he would bounce and twist so that I could not, with assistance, hold it over his face, and after several trials had to give up without ever getting my patient under the influence of chloroform. The pouring of water into a basin would produce paroxysm. I never succeeded in getting a particle of medicine down him, and I gave him up as a "lost negro." He died sometime during the night, and it was rather strange to think that such an immense quantity of saliva could be emitted in such a short time. It was tough and viscid. Opisthotonos was also plainly developed, and risus sardonicus also, which symptoms belong to tetanus.

In giving the history of this case, I am prompted by a two-fold desire. In the first place, I claim to be now and have been a student of medicine for several years, and consequently I want a little edification upon the subject. Does traumatic tetanus ever produce such a train of symptoms as described above? I confess I have never read of such. I have been forced to conclude that tetanus brought to light, as it were, the latent germ of hydrophobia that was dormant in his system, and that my patient perhaps had both diseases. The patient was entirely rational when not in a paroxysm, and would beg for water and talk very rationally for a negro of his age. There were intermissions between the paroxysms, sometimes of thirty minutes, I should suppose. I never saw a human being afflicted with or die of hydrophobia. I have seen dogs, hogs, cows, and one horse die of hydrophobia. I confess my inability to draw a line of demarcation between traumatic tetanus and hydrophobia so as to know, after studying the history of both closely, which killed my patient. He had never been bitten by a dog, as far as I know.

Respectfully,

C. H. H. FORT, M. D.

—*Am. Med. Bi-Weekly.*

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Aspiration in the Treatment of Hernia.

Mr. P. L. O'Neill, Medical Officer, Athy Workhouse, writes to the *Medical Press and Circular*:

The following case is illustrative of the success which Dr. Dieulafoy claims for the aspirator as an aid to the taxis in the reduction of hernia, and likewise of the complete harmlessness of one or more

punctures in the intestines, even of patients having a peculiar liability to serous inflammation :

On Sunday, the 19th inst., a patient, far advanced in Bright's disease of kidney, and who had, for some years, a small hernial protrusion, for which he usually wore a truss, was admitted to the Infirmary under the following circumstances, viz: Immediately before his admission, while lifting a weight in the absence of the truss, the hernia, which had hitherto confined itself to the region of the external abdominal ring, and was not at any time larger than a pigeon's egg, fell into the scrotum, and in a few moments became as large as a foot-ball, assuming the most exquisite tenderness. I saw him a few hours after the occurrence, but he could not permit me to touch the tumor. To allay the pain, I injected a quarter of a grain of acetate of morphia subcutaneously, and had warm fomentations and a stimulating enema administered.

One hour afterward I revisited patient, and found pain and tenderness abated, but manifested symptoms of strangulation, without any diminution in the size of the tumor. I applied the taxis for ten minutes without success: then had patient placed in a warm bath, and repeated the taxis, with no better result. I next resolved on giving Dieulafoy's method a fair trial, and accordingly aspirated the hernia with a hot needle, with very satisfactory results. I then replaced it with a No. 2, which brought away some reddish fluid, fecal contents and flatus: the needle, however, becoming clogged, I withdrew, cleaned and re-inserted it in another part of the tumor, with the most satisfactory results. Large quantities of flatus were extracted, the hernia reduced to less than half the size it had been a few moments before, and the merest effort at the taxis placed the bowel within the abdomen. From that time to this (Saturday, 25th Nov.) patient has had a stool daily, and not the smallest inconvenience in the abdomen.

The features in the case most worthy of remark are:—1st. That morphia, subcutaneously injected, was preferred to the administration of chloroform, which I would have considered dangerous, owing to the renal affection and cardiac weakness. 2d. That patient escaped peritonitis, notwithstanding the peculiar liability such persons have to inflammations. 3d. The facility with which the tumor was reduced after aspiration.—*Med. & Surg. Reporter.*

Anæsthesia by the Injection of Cocaine into the Veins.

According to the *Medical Press and Comment*, M.M. Tizzoni and Graciano Gagliata in the *Revista Medica di Torino*, have examined the following points:

1. Is cocaine injected into the blood a true anæsthetic?
2. Is there any serious danger from its use?
3. What are the risks?

4. Upon what element does the chloral act?

They have drawn the following conclusions :

1. It is not a true anæsthetic, but a powerful hypnotic. Cutaneous sensibility is not abolished except by large doses. The cornea never properly loses its sensibility.

2. It is dangerous ; it is difficult to measure its action, which varies in different people ; it easily excites phlebitis. It is a poison to the heart.

3. Chloral acts directly on the muscular fibre. It determines contraction of the muscular fibre, and the heart stops in systole.

4. The best means to remedy accidents from chloral is to throw cold water on the head and spine. Pretended antidotes of strychnia, quinine, atropine, and curara are bad.—*Med. and Surg. Rep.*

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A Case of Hydrophobia.

By C. L. EDWARDS, M. D., Hyde Park.

Miss A. B. was bitten last August, between the fore and middle fingers of her right hand, by a small black-and-tan terrier dog. The injury was so slight that she did not send for medical aid, but sucked the wound, after which she applied Friar's balsam and pork rind. It healed rapidly and she thought nothing more about it; the dog was killed to satisfy popular superstition, but was not supposed to be rabid. On February 14, 1877, while washing the tea things in warm water she suddenly felt a "sharp, stinging pain" at the seat of injury, which during the evening and night extended up the arm to the shoulder. The next morning there was great difficulty in swallowing and a feeling of constriction in the neck and upper part of the chest. She being then at Norwood sent for Dr. Fogg, who immediately recognized the disease and advised removal to her home in Hyde Park, where she arrived at four p. m. the same day. I saw her at five p. m. She was then on a lounge, her tongue clean, skin cool, pulse 95 and hard. There was nothing unusual about her appearance. I noticed that when answering questions she spoke during the act of inspiration. Otherwise she was calm and tranquil, but on offering her some water from a tea spoon the true symptoms presented themselves ; at sight of it severe contraction of the muscles of the throat occurred, accompanied by a sort of spasmodic sobbing, which as the spoon approached her lips was fearfully increased. She tried bravely to take the water, but, with the exception of a few drops after great exertion, it was impossible. At my suggestion she went to bed ; I gave her one sixth of a grain of sulphate of morphine subcu-

taneously, ordered hot bricks to her feet, and injections of beef tea and brandy into the rectum *pro re nata*; perfect quiet was enjoined.

At three o'clock the next morning I was called, the messenger telling me that the poor girl was suffering terribly. I found her on her back, the hands clutching at the throat and chest, with severe spasms of muscular contraction; the pulse was 120; the skin very hot and moist; she had passed urine and retained two injections of beef tea and brandy, which had been given as ordered. A quarter of a grain of sulphate of morphine injected into the arm gave her comparative ease, but no sleep. I went home at six A. M. Accompanied by Dr. W. S. Everett, of Hyde Park, I saw her at ten A. M.; she was tolerably quiet when all the surroundings were still, but the opening of a door or the rustling of a dress would immediately bring on the spasms, and the attempt at swallowing was so painful that we thought it best to abandon it altogether. Her only complaint was that her head was dizzy and she felt "so, so tired;" pulse 120.

I saw her at one P. M., in consultation with Dr. C. C. Holmes, of Milton. The symptoms were rather more aggravated. She was ordered tincture of aconite, chloroform and alcohol to spine, and morphine sulphate one sixth grain, with chloral hydrate *gr. v.* subcutaneously as occasion required. During the afternoon she gradually grew worse, her urine passed involuntarily, and the throat got very dry and parched; she would make violent unsuccessful efforts to vomit, coughing frequently spitting out a thick bloody mucus, which she would take in her fingers and pull from her mouth, not being able to permit even the approach of a handkerchief to her face. "Water," was now her cry, "give me water," and so eager was she to relieve the dryness of her throat, that some water would actually be swallowed before she seemed to be aware of what she had done, and then the spasmodic choking would come on more severely.

During the night following, she had short periods of comparative ease, but the end seemed surely approaching. When the spasms now occurred they became more general, the body and lower extremities being terribly convulsed, so much so that it required half a grain of morphine once an hour for three successive hours to afford her any relief, and that was but little. The pulse became intermittent, ranging from 150 to 160. For two hours previous to death, which took place at 9.30 A. M., she was almost free from spasms, and she talked glibly of things which happened a year or two before, going through minutely the history of her dog bite. A little after nine A. M. she was seized with a severe spasm, and died asphyxiated in less than half an hour.

There were no attempts made at any time during her sickness to bite or to bark like a dog, but there was a very harsh dry cough which I can easily imagine that the ignorant might have conjured into a bark. It was just sixty-two hours from the time she first felt the pain in her hand till death ensued. *Raum. Med. Jour.*

EDITORIAL.

The Situation.

The medical situation we mean, not the political, financial or commercial situation, but as we have numerous inquirers upon the medical situation in Buffalo and vicinity, we deem it not uninteresting to quite a number of young men just entering the arena of medical practice to hear something of the prospects offered here to the well-informed, honest, earnest workers, in our "glorious" profession.

Buffalo contains about 150,000 people liable to require the services of a physician; 20,000 of these are now supported by the poor department, and are really not very paying clients, though it must be confessed that it offers quite a large field for labor, valuable to the young man for experience, but not productive of large pecuniary returns; 20,000 or 30,000 more of our population, if sick or disabled, are cared for by hospitals, asylums, dispensaries and other so-called charitable institutions not returning to physicians any consideration for their services.

This leaves us about 100,000 people open to require our services and expecting to be *charged* the usual fees for attendance. To supply this great want we have, as near as can be estimated, 216 physicians and at least twenty or thirty midwives, to whom may fairly be assigned the care in natural labor of nearly the entire German population. This divided equally will give one physician to every 420 people, who are to be treated by physicians, if sick, and *charged* the usual prices, not more than 50 per cent. of which can be reckoned upon as good. Average attendance annually has been estimated at one dollar each, which would afford, if equally divided, an annual salary of \$420 *charged*, one-half off; but it is not to be forgotten that some old and well established physicians attend ten times their proportion, and this mostly from the paying classes, thus lessening the chances to present aspirants for popular favor to a very great extent.

Comment upon all this is quite unnecessary, but says our correspondent now located in a neighboring village, "I have a large and tiresome ride, and if Buffalo is so well supplied with physicians who are so poorly paid, how is it that so many live in elegance and "fare sumptuously every day?" True, we have among us some who are well known in all Western New York and who are receiving the patronage of a wide circle of patrons; they scarcely draw their supplies from the city at all; are wholly independent of popular favor by reason of long lives of popular patronage, combined with business talent which few possess.

These are the men *you* can see. They have houses, and carriages and servants, and are always to be seen or heard of; but oftentimes their capable and intelligent co-laborers, who have not yet attained to their distinctions, cannot be seen or heard of even by common observers. However, *we* can see them in the future with perfect distinctness; can see how they may rise to honor and fame; how they may meet with true professional success; but we cannot see how they are to obtain at such fearful odds the one all-absorbing, all-essential, everywhere coveted success of wealth or competence. Physicians who aim at riches should avoid Buffalo. Buffalo physicians are contented to strive to lay up treasure "where moth and rust doth not corrupt," and have long since abandoned the pursuit of earthly treasure. The field is open to all, and we most cordially invite good runners to join in the chase, promising good company, true, hearty, good fellowship, a jolly good time and a glorious reward.

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The Bergman vs. "Dr." Volker Case Settled.

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"The Mills of the Gods grind slow, but they grind exceedingly fine."

Bergman so well known to the profession in Buffalo, and to all attentive readers of the October and November numbers of our JOURNAL, is dead. His various law suits terminating unsuccessfully, life at last became too burdensome, and he took the matter into his own hands. He managed, we are told, by aid of the hook and rope prepared to reduce his dislocated hip, (?) to hang himself until dead. He gave his body to the doctor, his soul to God, and ended his life March 2d, 1877, upon his own improvised gallows, and the doctors all said amen. The *post mortem*, made in presence of nearly the entire Medical Profession of Buffalo, and the attorneys in the recent trial for malpractice, showed *fracture of the neck of femur*, the head of bone resting in the acetabulum with ligamentous union and absorption of neck, and made the medical testimony reported in full in our October, and the correspondence published in our November number upon Bergman vs. "Dr." Volker of the greatest possible interest and significance, now worthy careful re-perusal. Not as showing anything new or uncommon in the symptoms or nature of hip-joint injuries, but as showing how careful we should be in the selection of medical advisors, how attentively we should scrutinize our own conclusions and how we should remember that *experience* teaches many valuable lessons. In all respects the trial and testimony in the case of Bergman vs. Volker, is one of the most suggestive and remarkable of any Medico-legal suit in our court record. Reading the testimony in the light of the *post mortem* examination is painfully suggestive, showing how it is possible, for even an honest man, to make his facts correspond with, and sustain his theories, never himself finding out that his theories were made first and his facts, imaginary and unreal.

Changes in the Drug Trade.

MR. C. M. LYMAN having succeeded to the interest of Mr. William Peabody, at 811 Main street, pledges himself that the reputation of the store shall be fully equal to the past in all respects in the quality of the goods, the competency of assistance, promptness and dispatch. He announces that he shall continue the name "Peabody's Drug Store," and that he has made arrangements with parties with whom Mr. Peabody has heretofore dealt in the Surgical, Chemical and Pharmaceutical line as agent for Tiemann, Phelps and others, so that all the wants of the profession will be as amply provided for as they have heretofore been by Mr. Peabody.

Mr. Lyman is well known in Buffalo and vicinity as a competent and reliable druggist, and will take with him to his new location a well-earned reputation.

MR. A. R. DAVIDSON (late manager of Peabody's Drug Store) has purchased his up-town Drug Store, 598 Main street, corner of Chippewa, where he proposes to continue the same business, to supply the best and most reliable Drugs and Chemicals at *reasonable prices*. Mr. Davidson is well and favorably known to the profession and by the general public, and will enjoy the confidence of all who have done business with him.

MR. RODENBACH has also established a new up-town Drug Store corner of Main and Allen streets, where the choicest articles of the *Materia Medica* are carefully dispensed, and we have no doubt his beautiful new store and stock will attract his full share of public patronage.

MR. WILLIAM KING's old Drug Store in Buffalo makes no changes as we have yet learned. His long and well-established successful business knows no change. It is fully established by long and faithful square dealing, and no alterations need be looked for.

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DEATH OF DR. GURDON BUCK, of New York.—Dr. Buck, who has been ill for a long time, died of Uremic Coma, March 6th. He was born May 4th, 1807. He was a well known and successful Surgeon. His achievements were notably in autoplasic Surgery and in the treatment of fractures. We are indebted to him perhaps more than to any other Surgeon for our present simple extension plan of treating fractures of the thigh by means of weight and pulley.

The new edition of the United States Dispensatory will be ready in a few weeks. Part I, has been revised by Dr. George B. Wood. Part II and III, by Dr. H. C. Wood, aided by Prof. Bridges of the Philadelphia College of Pharmacy.—*Record*.

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Books Reviewed.

A Series of American Clinical Lectures. Edited by E. C. SQUIRE, M. D. Vol. II.; January to December, 1876. New York: G. P. Putnam's Sons, 182 Fifth Avenue. 1877, pp. 340.

In clearness and thoroughness of detail these twelve lectures are models of clinical instruction. They are pleasant to read, and desirable for the library, being faithful indices of the best American medical practice and opinions of to-day.

Under the head of "The Principle of Physiological Antagonism as Applied to the Treatment of the Febrile State," Dr. Bartholow considers the value of quinia, digitalis, aconite and veratrum viride as apyretics. Of salicylic acid he says; It seems in a high degree probable that the anti-anti-pyretic effects are due to its power to arrest the activity of disease and disease-producing organs, and to destroy infectious material and ferments. Of cold baths he says; "Although for the condition of high temperature, especially for hyper-pyrexia cold baths, 96° to 60° F., must be regarded as the most appropriate remedy; we are nevertheless in many inflammatory affections restricted to the use of anti-pyretic medicines."

As a conclusion, "When the state of pyrexia is the most important element in the morbid complexus, cold baths, quinia and digitalis are the remedies to be employed. In the fever of inflammation, is the action of the heart vigorous and the arterial tension high? aconite and veratrum viride are indicated. Is the action of the heart feeble and the tension of the vessels low? quinia and digitalis are more appropriate. Is the fever due to putrid ferments, to disease-producing organisms? quinia and salicylic acid are required. Dr. Jewell speaks of a lesion of nutrition in "certain forms of morbid nervous sensibility," calling for rest, and nutritive material; also of a "loss of balance between waste and repair." He says; "In ninety-nine cases out of a hundred of nervous disease, you will have to meet with this lesion of nutrition caused by too much action and too little rest, or by want of nutritive matter in the blood." Farther on; "But I am safe in saying that the value and necessity of rest, physical, mental and emotional, in the various forms of neurasthenia is only beginning to be understood by the profession." Rest he defines as cessation or change of activity. Among other remedies he mentions

the acid phosphate of lime as an excellent appetizer. He also says: "You will find electricity intelligently and faithfully used one of your most effective agents in nervous disease. As a sedative, the prolonged use of ergotine, in doses of from two to five grains is recommended, combined with one-fourth to one-sixth of a grain of digitalis, if the circulation is fluctuating.

Dr. Seguin, in his lecture on "Melancholia at Home," says; "Opium, cannabis, indica and alcohol often make melancholic patients sleep very well. They improve the nutrition of the brain, render the circulation in it more active and thus expedite a cure. Opium and cannabis I give in pillular form pushing the opium up to the point of slight narcosis and seldom giving more than a grain and a half of cannabis in twenty-four hours." Aside from these agents for procuring sleep, he chooses from the "restoratives" of Headland to improve nutrition, seeks to remove the cause of the prostration, whatever that may be, and the patient must have three good meals every twenty-four hours, of meat, eggs, etc., and unbroken sleep at night, with a cheerful moral atmosphere by day. He says; "Galvanization of the spinal cord, and of the cervical sympathetic have been used in Europe and in this country with apparent success. I have great faith in the efficacy of amusement and employment in the treatment of insanity in general, and of melancholia more particularly. If you are not faithfully and actively aided by the patient's friends, or by nurses, in carrying out the moral treatment, medication will prove quite useless." Dr. Delafield calls the stomach pump to his aid in cases of dyspepsia of long standing, characterized by pain in the stomach and vomiting, using it once a day, at most, and three hours after the taking of a meal of solid food. For functional derangement of the small intestine, another form of dyspepsia, he says; "The drugs indicated are cubebs, ipecac and asafœtida; cubebs, ten grains of the powder or twenty minims of the tincture; ipecac, one-eighth of a grain, increased gradually to four grains, asafœtida in four-grain sugar-coated pills, or the compound Galbanum pill. The great majority of cases of dyspepsia, coming to this clinic are cases of liver dyspepsia." These he divides into two classes, the fat and the lean. Exercise in the open air is prescribed for both, violent muscular exercise for the former, riding and short walks for the latter. Constipation, existing in both cases, is to be relieved in the former, by a mild laxative, as the dinner pill, in the latter by rhubarb, strychnia, podophyllin, aloes, etc.; mineral acids to improve the appetite.

Dr. Noyes devotes sixty pages to a consideration of the diseases of the eye, and it is an admirable lecture.

Dr. Sands urges the performance of laryngotomy, or tracheotomy, when suffocation is impending, whether there are grounds for hope of the ultimate recovery of the patient or not; as, if well and carefully done, it makes even the small remaining portion of life more comfortable, and it is often impossible to say who will recover, and who may not. He proposes to have the

patient anesthetized, usually employing ether. "Methods of Examining the Upper Air Passages" are ably given by Dr. Lefferts. He describes in minute detail every step of the operation. His language is most concise, and direct, and we cannot see how instruction could be better or more forcibly given. The hypertrophied prostate, and its treatment, are well and carefully considered by Dr. Weir.

Dr. Pooley, in discoursing of "Congenital Phimosis," says: "I have come to take what many will consider extreme ground on the subject of nocturnal enuresis. I regard this affection, in boys, as almost always the result of phimosis. Not necessarily of extreme phimosis, but quite often of that moderate degree of it, which may almost be considered the normal condition in little children." His remedy is circumcision. Of hare lip he says: "In the operation itself probably the most important step is the thorough detachment of the lip from its osseous and other attachments, so that the edges, when freshened, may come completely and easily together, without the least strain." He uses the simple interrupted suture, and leaves the lip uncovered.

Of "Spinal Irritation," Dr. Hammond says: "Its symptoms are more certainly referable to anemia than to any other condition. Those medicines, such as strychnine, phosphorus and picrotoxine, which increase the amount of blood in the cord, are the remedies which are most effectual in combating the disease, while others, such as ergot and belladonna, the action of which is to diminish the amount of intra-spinal blood, invariably aggravate the symptoms. Dr. Jewell believes that spinal derangement is the result of visceral trouble. Dr. Hammond believes that visceral derangements are more frequently the result of spinal anemia. He says: "Opium is a remedy of great power in spinal irritation. The entire drug is, I think, better than any of its constituents. A pill of a grain may be taken morning and night. Alcohol, in some form or other, is an article of food which cannot well be done without. Among medical means, for relief of vomiting, I have never used anything comparable to valerianate of caffeine, which may be given in doses of from three to five grains, as often as it appears to be required. In a very obstinate case which I saw recently, in consultation with Dr. Whybrew, every noted medicine had been tried without effect, when a couple of doses of valerianate of caffeine arrested the vomiting."

The Treatment of Eczema is by Dr. Taylor, of Charity Hospital, New York. He uses frequent applications of very hot water in dry eczema, glycerine and water in the intervals being applied on linen lint. In moist eczema the hot water, he says, does harm, though a few ablutions may be used to relieve burning pruritus in the most severe stage. Glycerine and black wash on lint is a favorite application. In both varieties an alkaline cathartic treatment is used. The lead and opium wash, with a little glycerine, is also recommended for the moist varieties. He says for dry eczema the

remedy which I use most frequently here in the clinic is Anderson's powder, as follows :

R.

Pulv. Starch,	oz. j.
Oxide of Zinc,	oz. ss.
Pulv. Camphor,	oz. iss.

M.

This must be made into a perfectly impalpable powder and frequently and thickly dusted over the affected skin, or rubbed into fine linen lint and applied. For eczema capitis, an oxide of zinc and mercury ointment is used after the scabs have been loosened by glycerine, and gentle manipulation with a comb, and removed. Bismuth may be used in the place of the oxide of zinc and camphor added to lessen pruritis. The child's diet is to be carefully regulated, milk being given it for food in preference to anything else. A little bread and meat both may also be used.

"Peripheral Paralysis," by Dr. Miles, of Baltimore, closes the volume. He says : "The remedy I have found most useful in peripheral paralysis, the remedy par excellence, is electricity, either the induced or galvanic current. While many regard it a matter of indifference which of these two sorts of electricity we apply I must say that in the great majority of cases I give the decided preference to the galvanic or constant current, though I advise you not to use either exclusively, to the neglect of the other, but seek to combine their employment in your treatment." It is impossible in so brief a review to do more than indicate the general scope and direction of this work. It should be read to be properly appreciated.

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✓ *The Electric Bath. Its Medical Uses, Effects and Appliance.*

By GEORGE M. SCHWEIG, M. D., Member of the New York County Medical Society. New York : G. P. Putnam's Sons, 182 Fifth Avenue ; 1877, pp. 131. Price \$1.00. Buffalo : Peter Paul & Bro.

This little book is eminently practical. Chapter II. describes the mode of construction of the bath tub, indicates the best materials, and batteries, etc. If approximate prices were given, this part of the work would be more complete.

Mode of administration is next considered, showing that the writer knows of what he speaks. Medication of the water is thought to be necessary in some cases, and useless in others. Tartrate of iron and ammonia is recommended to be used in this manner in chlorosis ; extract of malt, alone or

in conjunction with iron, in debility and malnutrition ; iodide of potassium for the elimination of lead ; and iodide in chronic articular affections, accompanied by exudation. On page 22 he says: "In cases where paralyzed muscles have lost their faradic irritability, galvanic interruptions are almost indispensable to successful treatment." Concentration of currents, determination of their direction, and giving a shock, are fully described.

In the chapter on physiological effects, the characteristic differences between the bath and other methods of electrization are discussed. On page 43 he says: "The importance of the electric bath as a physiological stimulant and tonic cannot be overrated. I deem it superior in this respect to any other known agent." Farther on he says: "I have never obtained from galvanization of the nervous centres, which I have practiced in a great number of cases, the striking effects on the alimentary processes, which are so uniform a result of the baths." Freedom from pain is claimed as a characteristic of both galvanic and faradic baths *when properly administered*.

Their therapeutical uses are considered under the following heads: "The electric bath as a diagnostic; as an equalizer of the circulation; as a general counter-irritant; as a general invigorant and tonic. Its hypnotic and sedative influence. Its improvement of irritation. As a prophylactic."

The closing chapter is devoted to special therapeutics and clinical record. In the clinical record is the test of the whole matter, and the result is strongly in favor of the baths as important accessories to other well-known and approved modes of treatment. What the result might be in other hands than those of Dr. Schweig remains yet to be seen. In paralysis, habitual constipation, locomotor ataxia, mercurial stomatitis, cerebral exhaustion and some neuralgias he obtains unusual and brilliant cures. Cases that have long proved rebellious to other modes of treatment have made a good and sometimes rapid recovery: some more slow, under the use of the baths alone, or of the baths in combination with a little medication. Thirty-four cases are given in full, as illustrations. The author's observation of this agent has, he says, extended over a period of two and a half years. But very few failures are recorded, though baths are not administered to all who apply and can pay for them. They are used like other remedies when, and only when, they are indicated by the conditions of the patient. The advantage of the bath over other modes of electrization is claimed to be in its more general application to the peripheral nerves and consequent greater *power* through reflex action. Galvanism and galvanic faradism are both employed, but the former is considered of greatest use and importance. The mode of administration of a well-known remedy had been sufficiently successful to entitle it to a more extended trial; and those who desire to use it will find ample directions in this interesting little work to enable them to do so with success.

Spiritualism and Allied Causes and Conditions of Nervous Derangement. By WILLIAM A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System, in the Medical Department of the University of the City of New York, &c. New York: G. P. Putnam's Sons, 182 Fifth Avenue; 1876; pp. 366. Price, \$2.25. Buffalo: Peter Paul & Bro.

This is a bundle of marvelous stories, well told, of events and manifestations supposed, at the time of occurrence, to have been owing to supernatural influences, and between them are sandwiched satisfactory bits of philosophical refutation. They are gathered from a period of time, extending backward from the present, more than two thousand years. Contrasted with jugglers' tricks and professed legerdemain they are shown to be clumsy and inferior. People who were not very credulous would not have been misled by them. Spiritualism, this author regards, as a combination of slight-of-hand deception and nervous disease. Variations of human susceptibility to electricity and magnetism are plainly pointed out; also the power of concentration of attention to produce hypnotism and hallucinations. Certain abnormal mental conditions have long been acknowledged contagious, and, by Dr. Hammond, are said to have been mistakenly named, during some wild religious excitements, and revivals, "An outpouring of the Spirit of God." He calls attention to the lack of substantial proofs of so-called miraculous events, beyond their mere assertion. Stories are quoted from the lives of saints of Romanism and their probable worth is indicated. The different forms of temporary mental aberration are given, with good illustrations; also their self-limitation, power of the will to produce some of them, and the most efficient remedies. He says devils have a decided objection to dwelling in the same body with the bromides.

Hysteria is treated of as an unreasonable, emotional and muscular activity, occurring both with and without suspension of consciousness. The influence of imagination and hope in curing disease or temporarily arresting its ravages is noted. Levitation and incombustibility are the themes of an interesting chapter. That we are surrounded with mysteries which are genuine it is useless to deny; but many things more mysterious are now well understood, and it is almost, if not quite, disreputable to be any longer misled by them. That there still is, in this nineteenth century, need of such an expose, cannot be doubted, but is greatly to be deplored.

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Books and Pamphlets Received.

Annual report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the fiscal year 1876. John M. Woodworth, M. D., Washington Government Printing Office.

Transactions of the New York Pathological Society, volume I. Based on the proceeding for the year 1875, and largely supplemented from the records of 1844 to 1872. John C. Peters, M. D., editor, 1876. New York: William Wood & Co.

An Elementary Treatise on Diseases of the Skin, for the use of students and practitioners. By Henry G. Piffard, A. M. M. D. London and New York: McMillan & Co., 1876. Buffalo: Herger & Ulbrich.

Contributions to Repairative Surgery. By Gurdon Buck, M. D. Illustrated. New York: D. Appleton & Co., 1876. Buffalo: Herger & Ulbrich.

Report of the Dedicatory Exercises of the new building of Rush Medical College.

Catalogue and list of graduates of Jefferson Medical College, session of 1876-77.

Salicylic Acid: The experience of Maine physicians in its use. Reported by Frederic Henry Gerrish, M. D. Reprinted from the Transactions of the Maine Medical Association.

A Clinical Lecture on the Treatment of Incipient Stricture by Otis' Operation. Delivered at University College Hospital, London, March 16, 1876, by Mr. Berkeley Hill. Reprinted from the London "Lancet" of April 8, 1876.

An Address on Some of the Leading Public Health Questions; with remarks on the extent of swamp lands in the United States and their reclamation as a sanitary and economic measure. Delivered at the opening of the third annual meeting of the American Public Health Association, Baltimore, Md., November 9, 1875, by J. M. Toner, M. D.

Transactions of the Medical Society of the County of Erie. Semi-annual meeting June 13, 1876. Fifty-sixth annual meeting January 9, 1877. Buffalo: Haas & Klein.

On the Importance of the Uterine Ebb as a Factor in Pelvic Surgery. By Horatio R. Storer, M. D., of Boston, Mass., former Vice-President of the American Medical Association, and member of the Medico-Chirurgical and Obstetrical Societies of Edinburgh. Reprinted from the *Edinburgh Medical Journal* for January, 1877.

The Use of Uterine Supporters. By Clifton E. Wing, M. D., Boston, Mass. Seventh Annual Report of the New York Ophthalmic and Aural Institute, for the year ending December 31, 1876.

Pneumonic Pressure and the Genu-Pectoral Posture in the reduction of uterine laxations. By A. Libley Campbell, M. D., Augusta, Ga. William Wood & Co., New York, 1877.

Annual announcement of the Medical College of the Pacific.

An Illustrated Catalogue of Medical Publications. By William Wood & Co., New York.

The American Medical Association and the Pharmacopœia of the United States of America. By Edward R. Squibb, M. D., Brooklyn, N. Y.

The United States Pharmacopœia and the American Medical Association. To be obtained of Dr. H. C. Wood, 1631 Arch street, Philadelphia, by enclosing address and three cent stamp.

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ART. I.—*Physiological Considerations in Transfusion of Blood.*

By C. GEORGE, M. D., Ann Arbor, Mich.

Transfusion, apparently a new remedy, has already passed its second centennial. Hailed with great enthusiasm when first introduced, it soon shared the fate of all new remedies whose praise is solely due to empirical knowledge derived from their history in a few cases. It so came into disfavor that it was forbidden in practice by law, and thus it passed for a time into utter oblivion to be resuscitated by modern physicians. Now at the dawn of a new career it is again blessed with the empirical praise of physicians and surgeons, while the voice of the physiologist is almost unheard. Although the knowledge of the therapeutical indications of a remedy derived from empirical practice is not to be ignored, yet it is equally true that inductive knowledge of such indications derived from experimental investigations should at least be regarded with equal candor.

The questions at issue pertain to the therapeutical indications, and the kind of blood to be used—here we find the voice of empiricism in favor of using it almost promiscuously, and of employing any kind of blood, alkaline solutions, milk, etc., while the

physiologist demands human blood and that for certain specific indications only.

I propose to render a resumé of the views of the physiologists of the day in regard to these vital questions.

While it is generally conceded that the blood takes up oxygen as oxyhæmaglobin in its passage through the lungs, and that it is the carrier of nutritive elements derived in part directly from the stomach and intestines and indirectly through the thoracic duct, that it again in turn relieves the tissues from effete materials by conveying these substances to the excretory glands; it is still held by some physicians that the blood is more than a ready vehicle for oxygen and nutritive elements in their passage to the tissues and for effete material in its passage to the excretories, that it serves also as a direct nourishment through the albuminoids contained in the corpuscles and plasma in case that the requisite supply is not furnished by the proper organs. This view was derived from an observation of Bidder and Schmidt, who observed that the diminution of the blood, in quantity and quality, of a starved animal was greater than that of the body and at once concluded from this single observation that the blood served as nourishment. This opinion has exercised great influence on the therapeutical application of transfusion in the past and has not yet lost all sway. In conformity with this view, patients lying in the last stages of consumption have been, and are still treated with transfusion in the vain hope of enlivening the system with healthy blood. It is further practiced in various forms of chronic anæmia caused by incurable disease of the nutritive organs, and anæmia caused by fevers, etc.

Recent investigations by Panum have demonstrated the fallacy of this doctrine beyond the limits of reasonable doubt. (*Virchow's Archiv.*) His experiments are fully corroborated by those of Ponfick and Mittler. All recent investigators have come to the conclusion that in inanition the red corpuscles of the blood do not diminish more in proportion than the body itself, that transfusion will only increase the relative diminution of the weight of the body on account of the increased amount of oxygen required for the transfused blood; that the amount of fibrine is

not diminished, that it is soon reproduced to the original amount if depletion precedes transfusion of defibrinated blood in independent of the presence of inflammatory processes; and finally that the albuminoids diminish somewhat in amount, yet this diminution is not constantly observed; and that the relative amount of diminution is so slight, when it does take place, as to prove efficiently that the albuminoids are not consumed by the tissues.

The physiological action of albuminoids, however, is as yet but very imperfectly understood. It is probable that they are the carriers of water. There are at least three different kinds of albuminoids, viz.: fibrine which separates readily on coagulation, serum casein, which is obtained after removing the fibrine by diluting and neutralizing the serum, and lastly serum albumen, which remains after removing the two former varieties, and is freed by boiling, alcohol, &c. It is thought that the serum albumen is the vehicle for the circulating water and the salts in solution in the plasma, and that the serum casein, which is probably produced by the corpuscles, serves as immediate nourishment i. e. as material for reproduction. Fibrine is probably produced outside the vessels as a secondary product during cell formation and serves probably as material for certain secretions. This view is fully sustained by the fact that in all inflammatory processes the amount of fibrine is not diminished, but augmented as long as the inflammation is accompanied by increased cell production. The fact that the relative amount of fibrine is not diminished during inanition unaccompanied by inflammatory action, is still further support for the above theory.

Next in order we shall consider the part performed by the individual constituents of the blood in the respiratory process. The serum and plasma of the blood absorb as much oxygen as water, under equal pressure of temperature, i. e., 2-3 per cent. by volume. Hæmaglobine, an essential constituent of the red corpuscle unites chemically with oxygen, forming oxyhæmaglobine. The amount of oxygen which the blood is thus capable of absorbing depends chiefly on the number of red corpuscles, respectively on the amount of hæmaglobine which it contains. This process does not depend on either pressure or temperature. Oxyhæmaglobine is

readily decomposed by carbonic acid gas on account of the greater affinity of this substance for the oxygen than the hæmaglobine. The tissues receive their requisite supply of oxygen during the passage of the blood through the capillaries. Arterial blood is normally saturated with oxygen and this is still the case when the respired air contains only one-half the usual amount of oxygen, and again hæmaglobine does not combine with more oxygen, even if pure oxygen is respired, nor is the amount of oxygen consumed in twenty-four hours increased by inhaling pure oxygen. Respiration first becomes impaired when the oxygen in the respired air is reduced to one-third that of the usual quantity and suffocation is readily induced by air containing only from 3-5 per cent. by volume. Freed hæmaglobine takes no share in the respiratory process, it is a foreign substance and is carried off by the kidneys. Venous blood contains about 5 per cent. by volume less of oxygen than arterial blood, which consequently represents the amount of oxygen received by the tissues. Hence venous blood contains a comparatively large amount of dispensable oxygen and it first loses all traces of it when death has been caused by complete occlusion of the respiratory passages. In such cases we scarcely find a trace of oxygen in the air of the respiratory passages.

Carbonic acid is carried off by the water and salts of the plasma and particularly the alkaline carbonates and phosphates. Arterial blood is not free from carbonic acid, but contains usually from 26-30 per cent. by volume, whilst venous blood contains from 2-6 vol. more, this then is the amount taken from the tissues. The amount of carbonic acid found in the blood when death has been caused by suffocation, never exceeds 53 per cent. by volume. Venous blood is never saturated with carbonic acid, it can take under the usual barometric pressure and medium temperature from 150-180 per cent. by volume whilst water under the same conditions takes only about 100 per cent. by volume. The amount of carbonic acid, however, is increased when a mixture of carbonic acid and oxygen is inhaled, as is the case when an animal is subjected to such a mixture in a hermetically sealed reservoir. Death when thus produced differs essentially from that caused by the occlusion of the respiratory tract, this is car-

bonic acid poisoning, which is not accompanied by convulsions.

The amount of carbonic acid exhaled by the lungs is free, i. e., simply absorbed by the water ; another part which is held chemically as sesqui and bicarbonates, is liberated by boiling in air-tight covers, and the residue is combined as carbonates. Oxyhæmaglobine acts as an acid on the carbonates, liberating a greater part of CO₂ held loosely as bicarbonates, and also part of that held by the carbonates.

In defibrinated blood the red corpuscles have not lost the property of combining with oxygen, while the serum and its salts still absorb carbonic acid, and if left standing it yields oxygen and absorbs carbonic acid precisely like the original fluid. Defibrinated venous blood is for all practical purposes identical with defibrinated arterial blood ; should carbonic acid predominate it can easily be expelled by stirring the fluid rapidly in contact with pure air, when it will at once assume the bright scarlet color of fresh arterial blood. Defibrinated blood can be preserved for at least 24 hours in an air-tight vessel secured in ice. Blood thus preserved has simply to be raised to the normal temperature and saturated with oxygen before being employed.

There is a marked difference in the amount of oxygen which defibrinated blood is capable of absorbing, this depends entirely on number of corpuscles removed by the defibrinating process. That defibrinated blood is capable of performing all the functions of the vital fluid has been amply demonstrated by the experiments of Panum and Pontick. These investigators subjected dogs to repeated depletions and transfusions of similar defibrinated blood until there could scarcely have been left more than a trace of the original blood, the dogs appeared active and lively during these experiments and when finally killed the amount of fibrine was only slightly in arrear of the original amount. These experiments were not accompanied by inflammatory action.

To sum up—the red corpuscles by virtue of their hæmaglobine take up oxygen and convey it to the tissues, the water of the plasma is the vehicle for the nutritive elements and salts and conveys the carbonic acid and other products of waste to the proper emuncto-

ries. It seems also that it is the function of the albuminoids contained in the plasma to absorb and retain water, being thus the chief vehicle for the water received during alimentation and also for that excreted by the kidneys, skin, etc.

Grave complications, so frequently observed after the introduction of large quantities of blood have heretofore been attributed to the sudden increase of arterial pressure. This doctrine has had a grave influence on the therapeutics of transfusion,—it has induced practitioners to deplete before transfusing.

M. Herman has demonstrated that spring or distilled water can not be used for transfusion because it dissolves a proportionate amount of red corpuscles. Ponfick did not observe grave symptoms following alkaline solutions even in large quantities when the experiment was conducted slowly. By using an artificial serum (1 p. ct. Na. Cl. and albumen of egg) in large quantities he observed slight depression, which, however, subsided shortly after relieving the animals. The urine was always peculiarly affected, the kidneys did not manifest any symptoms indicative of augmented arterial pressure, the amount of urine was not perceptibly increased; its sp. gr. however was greatly reduced, had an alkaline reaction and contained large quantities of albumen of a foreign variety, deficient in urea. The alkaline reaction subsides with the disappearance of the albumen, simultaneously with these changes the urea increases in amount and the sp. gr. rises to its original height. The increased pressure of the vascular system however could not have been reduced by the exhalations of the skin, or discharges of the bowels, for both were very slight. In these experiments Ponfick did not observe the bloody excretions of former authors; they have to be attributed to other causes than augmentation of pressure.

Ponfick obtained very different results with natural serum; urine remains acid, sp. g. not affected, amount passed almost unaltered, no trace of albumen. These results are corroborated by the experiments of Stockvis, Lemay and Worm-Mueller.

Worm-Mueller in his experiments observed a considerable increase of pressure at the caecotide immediately after the operation, subsiding, however, soon afterwards. He sums up his result as follows: "It is highly probable that the vascular system can accom-

moderate itself within certain limits to larger or smaller quantities of blood without giving rise to material change in pressure or abnormal dilatation of the walls of the vessels, or any serious symptoms whatever." He attributes this function of adaptation of the vascular system to the influence of the vaso motor nervous system.

The danger of inducing an acute plethora by transfusion has thus been decidedly overestimated, the symptoms solely due to it are far too insignificant to warrant the heroic procedure of previous depletion; and these very symptoms may follow a preceding depletion if the transfusion is conducted too rapidly. Depletion however might be practiced with benefit if we could demonstrate with certainty that the corpuscles are undergoing disintegration, as in carbonic acid gas poisoning, in such cases the corpuscles are worse than useless.

Transfusions with similar defibrinated blood are not followed by any abnormal symptoms, contrarily when preceded by depletion they produce augmented animation. The amount of urine is not increased, color, spec. grav. and reaction remain normal, no trace of albumen detected. Direct transfusions with similar blood do not materially differ from those of defibrinated blood if no coagula are injected.

Transfusions with different kinds of blood, whether defibrinated or not, have had very different results from the above in the hands of all modern investigators.

Dyspnoea ensues rapidly as the operation progresses, manifested at first by increased frequency of respiration, it is soon accompanied by convulsive movements of the diaphragm and later by general convulsions. These symptoms are accompanied by frequent stools and severe vomiting which in time give place to tenesmus and intense nausea. There is complete suppression of urine and hæmaglobinuria is quickly announced by the appearance of a few bright red drops of dissolved hæmaglobine and cylinders, scales, etc., (catheter is always used). Depression follows rapidly, the respiratory movements become superficial and less frequent and all the muscles of the body relaxed. The released animals lie in a state of apathy and gloomy silence, broken from time to time by faint dismal groans until death terminates the scene. In section

the mucous membrane of the stomach duodenum and of the entire ileum is found of dark red color, greatly swollen and covered by a thick reddish mucus. The villi are swollen and indistinct, no discrete bloody effusions in their tissue. The same condition continues in increased intensity to the colon and reaches its height in the sigmoid flexure. Numerous hemorrhages in the mucous membrane. Rectum is similarly affected. The kidneys however contain the chief lesions caused by dissimilar blood, when enough is injected to produce any pathological condition whatever. They are greatly swollen, but not always infiltrated with blood; on the contrary the texture, particularly towards the periphery, appears frequently very pale of dirty greyish brown color. The capsule peels off readily and numerous sharply bordered spots and stripes of a reddish or coffee brown color are seen imbedded in the smooth distended surface of the peculiar brownish ground-texture of the organ. The appearance as well as the distribution of these spots and stripes reminds one of the multiple spots of hæmorrhagic nephritis. On section they appear in great numbers at the periphery, but less sharply contoured from the surrounding parenchyma, which is greatly swollen, very pale and of uniform color. Ferrein's pyramids render the inner half of a coarsely striated appearance. The Malpighian bodies appear shrunken on account of the slight amount of blood they contain. The papillæ (Markkegel) are very large and bloody toward the periphery, and the brown and red stripes radiating towards them alternate regularly. In severe cases the brownish color is so predominant that the reddish lines can scarcely be recognized. A dark brown or light colored fluid exudes from the papillæ on pressure in which small bodies are distinctly seen suspended. A similar fluid varying in amount is found in the pelvis of the kidneys and bladder. Fatal cases are characterized by absolute emptiness of the urinary reservoirs. The adipose tissue of the hilus is frequently remarkably œdematous.

Microscopical investigation has shown that all the brown spots and stripes in the cortical substance and the radiating lines in the pyramids are caused by solid plugs in the tubuli uriniferi. The color of these cylinders corresponds at first, exactly with the red corpuscles; in the latter stages it assumes a darker and brownish

tint. This does not depend on the presence of colored cells in the tubuli but on an imbibition of either a hyaline or corpuscular substance and hæmaglobine.

Bloody transuadations in the stomach and intestinal tract have indeed also been observed to follow transfusions with similar blood, yet these have to be attributed to very different factors, for they do not always appear nor are they permanent in character. In direct transfusion with similar blood we must take into consideration the great danger of introducing small coagula, or of transfusing the blood too rapidly; either of these factors is capable of producing all the above symptoms,—in transfusing defibrinated blood he must bear in mind that it is an easy matter to leave small particles of coagulated fibrine behind or of contaminating the blood otherwise. There is also great danger of introducing air with the frequent introduction of the syringe. Transfusions with similar blood have been performed without giving rise to any symptoms otherwise than those indicative of heightened animation. Transfusions with dissimilar blood whether defibrinated or not have always given rise to grave symptoms and the gravity depended on the amount introduced; and there is one grand factor which distinguishes the whole train of symptoms which may follow transfusions of similar blood from those which constantly follow transfusions of dissimilar blood, i. e. in the former the urine does not present any changes indicative of either kidney disease or destruction of the red corpuscles, whereas in the latter the urine always shows the peculiar action of dissimilar blood, and finally death may be caused by dissimilar blood without giving rise to those affections of the stomach and intestines which are the chief lesions observed after transfusions with similar blood.

Ponfick has demonstrated by chemical, microscopic and spectroscopic examination that the reddish color of the urine does not depend on the presence of red corpuscles but on loose hæmaglobine. Whenever he found red corpuscles he readily accounts for them by the very frequent catheterism to which the animals were subjected. The urine also contains brownish cylinders, the tubuli uriniferi. During the presence of the hæmaglobine urine had an alkaline reaction and of low sp. gr. Thus we see an unmistakable antagonism

between the exudation of the hæmaglobine and the normal action of the kidneys, the normal constituent of the urine being conspicuously absent during the presence of the hæmaglobine, and first reappearing a few hours after the last traces of hæmaglobine have disappeared. The quantity of hæmaglobine, the number of cylinders and the degree of reduction of sp. grav. stand in direct relation to the amount of dissimilar blood used for transfusion.

It is regarded by physiologists as a certainty that the hæmaglobine comes from the corpuscles of the foreign blood, that all dissimilar corpuscles undergo disintegration, and that they dare not take part in the respiratory process. When transfusions of such small quantities of dissimilar blood as do not produce hæmaglobinurea are repeated at comparatively short intervals the combined effect will appear as soon as such a quantity has been transfused as would produce hæmaglobinurea if injected at once.

The appearance of hæmaglobinurea is the beginning of the end—if the quantity of hæmaglobin excreted by the kidneys is so slight that it does not materially disturb the function of these organs then the victim will survive, but should the quantity be so great as to block up and destroy great number of tubules at once then death must inevitably terminate the scene.

Prevost and Dumas state that all dissimilar blood has a poisonous effect. Ponfick, Panum, Mittler and Landois have corroborated this statement so far in demonstrating experimentally that the blood of the following animals, viz: lamb, hog, calf, cat, also that of hen, rabbit and duck, etc., had a poisonous effect on the dog. Ponfick also proved that human blood had the same effect on the dog, so man cannot be regarded an exception to this physiological law and patients have actually expired immediately after lamb blood transfusions who, in all human probability, would have lived.*

In conclusion, it seems hardly necessary to state that transfusion is, as far as known at present, only indicated in cases of severe and fatal hemorrhage, that human blood alone will serve the purpose and that defibrinated blood has the advantage in being capable of performing all the functions of the vital fluid without endangering the system through coagula so readily produced in transfusions with original blood.

* See Denis' Lamb blood transfusion.

ART. II.—*Medical Society of the County of Albany.* Semi-monthly meeting Feb. 23d, 1876.

Dr. Henry March, President, in the chair. Dr. F. C. Curtis reported a case of Leucocythemia. The following is an abstract:

D. W., aged 30, native of this county, and by occupation a curer of fish. Had always been healthy in general; when young had rheumatism; had been in a malarious region fifteen or twenty years ago, but had not been affected by it. Began about four years ago to have night sweats without accompanying symptoms—often very profuse, and little affected by treatment. A year ago began to feel dull pain in the left side in region of spleen. A few months later the side was protruding, and examination showed the spleen greatly enlarged, reaching to the median line. There was little change in the symptoms excepting a degree of progressive weakness until last July, when for a time he experienced great dizziness. In October profuse diarrhoea set in, which lasted till death. This appeared to have the effect to reduce the size of the spleen, as it diminished greatly. He had dyspnoea and symptoms of heart weakening, which at one time were very urgent. There was congestion of the lungs and a mitral systolic murmur. Thrombosis of popliteal vein occurred on left side, and not long after on right. Examination of the blood showed a large excess of white globules. He began finally to grow stronger although the diarrhoea still continued, no effort being made to check it, as tympanitis and distress always ensued, and he finally was able to sit up most of the day. Cod-liver oil and bitter tonics comprised the treatment. Iron was not borne. For several weeks he appeared to be improving in all respects, when pleurisy set in, and he died ten days after. Post mortem examination showed a spleen having a size of 10 inches by 7½ by 5. The liver was also much enlarged and apparently fatty. Kidneys large. The right pleura was filled completely with serum. The blood was clotted, some of the clots being colorless, but most of the blood having a mahogany color. A point of chief interest in the case is the rapid and permanent reduction of the spleen in size after profuse diarrhoea set in, and also the benefit evidently following the use of cod-liver oil in building him up and possibly affecting his disease specifically.

Dr. Hannon said he thought Leucocythemia a very questionable disease. He would ask three questions: where the white corpuscles were made, how they got into the circulation, and how they destroyed the red globules?

Dr. Curtis said that if the origin of the white globules was a point at issue, it is held by many that the spleen is their starting point, and from these they pass into the circulation. He did not think that they destroyed the red globules.

Dr. Munson asked if there was any difference in the size of the leucocytes, as compared to the normal size, and also if the sight was interfered with.

Dr. Curtis said that he did not know if there was any difference in the size. The sight was not impaired.

Dr. Hannon enquired what caused death?

Dr. Curtis said that he did not understand the question. The white corpuscles destroy life by not being able to support it. The red globules are the life-supporting ones.

Dr. Hannon asked if the enlarged spleen might not have originated from miasm?

Dr. Curtis said that did not constitute Leucocythemia.

Dr. Munson said he thought it an interesting fact that Leucocytes did not emigrate into other tissues, but remained in the blood.

Dr. James S. Bailey remarked that he was much interested in the case and in the post mortem appearances. He saw enough to account for death. This was the second case reported before the society since its organization. Dr. Myron Davis had reported one case seven years before. In regard to the size of the spleen he thought Dr. Van Derveer had one in his office which was larger.

Dr. J. M. Bigelow reported a case of tobacco poisoning. He said: August 28th, 1875, I was hastily summoned to attend Mr. T. S., aged 26, clerk, single, who had been suddenly seized with a convulsion while walking with a friend on the street. He was stricken without premonition, and was conveyed to a neighboring store, where I first saw him. His skin was very pallid and presented an anæmic appearance; his features were pinched and contracted; his pulse was irregular; for a few seconds it was very

rapid, then quite slow and labored; sometimes thready and hurried, at others retarded and intermittent. At one time the pulse counted 136 to the minute, and in a short time thereafter sank to 38 per minute. His heart beat very irregularly; this was evinced by palpitative, tremulous motion of the organ, especially when lying upon the left side. The sounds of the heart were muffled, and seemed to almost run into each other, indicating that variety of irritable heart recently mentioned by Dr. Adams in the *Lancet*. The temperature ranged from 98° to 99.5° F. His lips were pale and bloodless; eyes staring; pupils dilated. He complained of great pain and distress in the left side of the chest, especially around the precordial region. Suffered great dyspnoea, drew long sighs, made a gulping effort at emesis, had hiccough, and cold perspiration, and presented great physical and nervous prostration. These symptoms were rapidly succeeded by clonic convulsions, which produced great muscular agitation, particularly of the extremities. The teeth were shut together, hands tightly clinched; the legs flexed and extended in rapid alternation. With the cessation of these spasms, the patient complained of anesthesia, more or less complete, especially of the left side of the extremities and of the tip of the tongue; also spoke of excessive languor and nervous tremor.

These convulsions were not attended by any loss of consciousness, for in their cessation he would repeat our conversation and assure us that although he knew what was occurring near and around him, yet he was powerless to help himself or to control the excessive muscular perturbations. It was during the first visit that I noticed, after the transit of the convulsions, a cataleptic condition of the arms and legs. If a leg or arm was extended or flexed or uplifted, it would retain that position for at least five minutes, or until it was reduced to a more comfortable position. This condition passed off and was succeeded almost immediately by hysteric tremors, convulsive twitchings of the flexor muscles of the whole body, accompanied by an agonized apprehension of some rapidly approaching physical catastrophe, the result of which would be death. He would clutch the arm of any by-stander and beseech him to save his life, to relieve him from the great precor-

dial distress and threatening suffocation. This fear was in some subsequent attacks the cause of prolonged mental and bodily excitement. Conversation, rapid walking or any violent motion of the attendants would provoke these spasmodic attacks and produce great nervous irritability. His disposition, from that of amiable, became fretful and peevish. At the time of the first attack there was administered hypodermically gr. $\frac{1}{2}$ sulph. morphia and prescribed

R. Bromide Potass gr. x.
Ammon. Carb. gr. v.
Aqua $\frac{3}{4}$ ℥

Repeat every two hours. He was removed to his home when I saw him again on the 19th of August. On careful enquiry I learned that this attack was the third within a year, each attack occurring at the commencement of each six months. Mr. S. had smoked tobacco since he was twelve years of age, some days using as many as ten cigars, and often substituted for luncheon three or four strong ones. He had little or no appetite most of the time: was pale and cadaverous, languid and weak: ate but little and at irregular hours: but from his rise in the morning to his retirement at night, he was never without his "weed." He was restless: would start and jump in his sleep: had become very irritable in his disposition, and greatly enfeebled. A searching scrutiny of his family history failed to elicit any trace of epilepsy or other nervous disorder, and with regard to himself, he denied any other sickness than the present. The above treatment was continued until the 1st of September, when a tonic of the elixir Ferri Strych. et Quin. 5℥ after meals and Pot. Bromide gr. xv at bedtime were prescribed. He had resumed his occupation and had so much improved that I ceased visiting him, after leaving some directions about his diet and general health and interdicting tobacco in any form. I left him not altogether clear in my mind as to the cause of the singular symptoms he had presented. On September 5th, 1875, I was again summoned to him. He was under the influence of the "worst fit he had ever had," as the messenger said. On arrival at the house of the friend he was visiting, I found him reclining on the lounge, presenting the appearance in speech and looks of an

acute maniac. At one moment, seizing his friends, he would implore them to save him from some indescribable "something," which was stifling him; the next moment he fell into the most violent convulsions I have ever witnessed. He presented the same symptoms in rapid succession as have been previously narrated, excepting that his fear of death had become a mania. On enquiry I found that he had been quite fretful for a day or two previous, neglecting his meals, and smoked from eight to ten cigars daily. I prescribed,

- R. Ammonia,
Quinia,
Zinci Valerianatis aa gr. j.
Simple Syrup dr. i, to be given every three hours,
- R. Pot. Bromide gr. x,
Tr. Aromat Comp. dr. i,
Simple Syrup dr. ij, to be given every six hours.

On the 6th of September he was much better, but still suffered severely from hysteric and ataxic tremors of the limbs and arms; also complained of great distress in the cardiac region which would occasionally precipitate a transient convulsive agitation of the whole body. He could hardly sit upright; called my attention to the great numbness of the extremities and of the tongue; he felt cold and chilly. Continued the same treatment. On the 7th he had so far improved as to be able to sit up in an easy chair; slept well and had no return of the spells for some four hours. On the 8th Dr. Howe was called in consultation, and confirmed the diagnosis of Tobacco Poisoning, and the treatment as given. From this time onward preparations of Strych. and Iron, good diet, fresh air and moderate exercise were enjoined. Also Pot. Bromide in gr. x doses twice daily in combination with Tr. Aromat Comp. 3i doses. On the 11th he went into the country, and returned on the 30th, fully restored in health, and better than he had been for years. Since that time, on three occasions, he has smoked from four to six cigars in succession, followed by a return, with greater or less violence, of the symptoms. He has since given up entirely the use of tobacco, and now enjoys the best of health.

Connected with the above example of the evil effects of the abuse of tobacco, it may be interesting to note a few other results which have been mentioned as attendants of tobacco poisoning.

Owing to the enormous consumption of tobacco in France and the alarming increase of nervous disorders in the empire, Napoleon, in 1861, called the attention of the Academy of Medicine at Paris to the subject. A scientific statician, with an imperial commission, was empowered to collect facts and data for a report. The result showed that whereas the annual tobacco tax from 1812 to 1862 was 28,000,000 francs, and that in the hospital there were 8,000 paralytics and insane, in 1862 the tax had risen to 180,000,000 francs and the number in the hospitals increased to 40,000 paralytics and insane. A commission was then appointed to enquire into the influence of tobacco on the human system. The report stated that a large number of the diseases of the nervous system and of the heart noticed in the cases of those affected with paralysis or insanity were regarded as the sequence of excessive indulgence in the use of tobacco. M. Jolly said that "Tobacco seems primarily to act upon the organic nervous system, depressing its functions, such as the nutrition of the body, circulation of the blood, and the number of the red corpuscles in the blood." He further states that "tobacco produces weakness of the brain and spinal marrow." Attention was also called to the bad digestion, benumbed intelligence and clouded memory of those who used tobacco to excess." Dr. Occaisue reports that "in twenty-two out of thirty-three case of tobacco smokers there were injurious disorders of the circulation, 'bruit de souffle' in the neck, palpitation, disorders of digestion, cloudiness of intellect, &c. In a majority of cases there was diminution of the red corpuscles of the blood and epistaxis, disturbed sleep and vertigo." Dr. B. W. Richardson observes "that smoking produces disturbance of the blood of the stomach, heart and brain, of the organs of sense, and of the nervous filaments of the sympathetic and organic nerves." Again he states that "tobacco smoking arrest oxygenation of the blood, and thus interferes with the full development of the structures of the body, especially in the young." Dr. Hutchinson, of London, also mentions Amaurosis. Dr. Derby, Assistant to Prof. Von Graffe, notes color blindness as an occasional sequence to tobacco smoking.

Whether the convulsions we have noticed are due to Anæmia of the brain and of the blood, or the result of more or less perma-

nent derangement of the organic system of nerves, is a question of vital interest to all admirers of the fragrant Havana.

Dr. Stonehouse said he had seen one case of acute mania which was produced by excessive tobacco smoking. The patient recovered on quitting its use.

Dr. Hannon said he did not think tobacco had a stupefying effect on the mental faculties, for some of the finest literary efforts have been brought forth after considerable smoking.

Dr. James S. Bailey said that he had experienced something of the evil effects of the weed, but to such an extent as spoken of in Dr. Bigelow's paper. He was happy to say that he used it no longer.

Adjourned.

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ART. III.—*Operative Treatment of Pleuritic Effusions (Serous).*

By HERMAN MYNTER, M. D. *

The theme I shall take the liberty of presenting to you this evening, and which I hope will be of some interest to you, although it may not offer anything new, is the operative treatment of the serous pleurisies. I have chosen this subject partly because I have a case to report, treated in this way, and partly because I am inclined to perform the operation at an earlier period than has been the custom, and believe that an early thoracentesis not only is allowed, but also from a pathologico-anatomical point of view is advisable.

I do not mention here the purulent pleurisies, empyema, because I am of the opinion that all agree to evacuate the matter here as soon as possible and only disagree as to the methods of doing it, although most physicians prefer a free incision.

An acute pleurisy commences like all inflammations with redness and hyperemia of the capillary vessels, the epithelium is thrust off, the serosa loses its gloss and smoothness and a soft membranous exudate is built on the surface of the serosa. This exudate consists, according to Rindfleisch, of blood fibrin from the capillary vessels, and contains large numbers of the thrust-off epithelial cells. These epithelial cells are, according to the investiga-

*Read before the Buffalo Medical Association, Feb. 1, 1875.

tions of Rindfleisch, capable of further development, and of forming tissue cells and vessels, and he is of the opinion, that most of the vessels afterwards found in this exudate, are formed of these epithelial cells, and only few come from the serosa. The more tissue there is formed, the more the fibrin vanishes by resorption, and while at first the membranous exudate could easily be removed from the serosa, the connection between them will now be more firm, the newly built tissue uniting with the tissue of the serosa. If the inflammation stops here we shall have a pleuritis sicca, and the serosa will have taken only a small part in the formation of the membranous exudate. Afterwards, we often find, that the pleura parietalis and viceralis have grown together, wholly or in part, on there is built a thick, fibrous, shining stratum, on different portions of the pleura. But generally the inflammation goes farther, and after some days the tissue of the serosa commences to take part in the inflammation. The serosa will then be found filled with numerous young tissue cells, especially near the surface, and on the surface they form an independent stratum, a pseudo-membrane that has a tendency to organization and must be distinguished from the membranous exudate, formed of fibrin and epithelial cells. In this pseudo-membrane capillary vessels are soon formed, and these capillary vessels are large and easily rupture, and we can thus get a hæmorrhagic exudate. While this membrane is being formed, a copious amount of serum is transuded from the vessels of the serosa which at first will be found in the lowest part of the cavity of the pleura, but, as it increases in quantity, it compresses the lung, displaces the liver, heart and diaphragm, expands the chest and inter-costal spaces.

If resorption takes place, the organs can and will return to their normal places, and the lung be perfectly expanded again. But according to Foster, this only takes place when resorption occurs in three or four weeks. If it lasts longer a change takes place that prevents the expansion of the lung and by that, complete recovery, and this is the retraction of the newly built tissue.

In accordance with the investigations of Brouardel the lung is surrounded after two or three weeks with a firm tissue-stroma,

and by that prevented from perfectly expanding. The new building of tissue is not confined to the surface of the serosa but attacks the serosa itself and the interlobular walls, and thus force its way into the lung.

Thus there is formed an interstitial pneumonia, and this commences during the first days of the inflammation. By that, too, the lung loses its ability of expansion, and when the resorption at last sets in, the thorax must sink in and we get deformity, scoliosis, with all its consequences. The retraction of the newly-built tissue in the interlobular walls has also another effect, and that is the dilatation of the bronchi, a relation that Niemeier has shown and that can produce other diseases.

But the resorption itself meets with difficulties, when the tissues commence to retract, the newly-built vessels, through which the resorption takes place, partly vanishing and partly getting smaller.

If we now perform thoracentesis at an early period, for instance in the first week, or as soon as the diagnosis is fixed, the relation will be modified. The retraction of the tissue has not commenced, and the expansion of the lung will take place in the same degree as the exudate gets smaller, and when this has gone, the lung is perfectly expanded, which we can show,

1st, By the difference in the percussion, which becomes clear, (generally it does not become perfectly clear, because the pseudo-membranes remain).

2d. By the respiration which is heard vesicular to the base of the lung.

3d. By the entrance of the vibrations of the voice, which, to be sure, are not felt quite as well as over the healthy lung, and

4th. By the frequent entrance of the friction sound; the patient too, feels much relieved and breathes more easily and better.

But, you may say, you remove the exudate, but how will you prevent its coming again? It often comes again, but then you can operate again, and with a capillary trocar this operation is of so little importance that it hardly deserves the name of operation, and the danger is, judging by the numerous operations

which have been performed, very small, if you are only careful to have a clean apparatus and to exclude the air.

Even if you penetrate the lung with such a small trocar, it will not be of great importance and will result only in a small interstitial pneumonia around the wound. But often the exudate does not appear again, and possibly the newly-built tissue has something to do with that. It is elastic, and when the lung now suddenly expands, the same change must occur in the tissue as when it retracts gradually, namely compression of the vessels, and so, what without thoracentesis prevents the resorption, might possibly after the thoracentesis prevent a new exudation. This is only my theory, but it is a fact, that the exudate often does not appear again, and that immediate recovery often occurs after a thoracentesis, performed at an early period. A danger that has been thought important is the possible transformation of a serous exudate into a purulent, that is, the formation of empyema. I do not remember to have seen that occur, although I have seen many early thoracenteses performed, and when the apparatus is clean, and the air excluded, I do not believe that the operation has to bear the blame if this occurs.

As to the early operation itself, experience has shown that the prospect of recovery diminishes in direct proportion to the duration of the disease. Thus Dr. Evans found, that the percentage of death, when the operation was performed in the fourth week was 12 per cent.; 23 per cent. when it was performed between the first and second month; 50 per cent. in the third month, and 62 per cent. after the fourth month. He has gathered 308 cases in which the operation was performed for serous exudate, and only in two cases death occurred owing to the operation, in one case through hæmorrhage from an artery wounded by the operation, and in another from the shock. And even in cases where death occurs afterwards, life was prolonged and the patient felt much relieved.

Another reason to operate early is, that pleuritis can occasion sudden death, through thrombosis of the pulmonary artery, produced by disturbances of the circulation in a mechanical manner. Moreover a compressed lung is especially exposed to tuberculosis and other chronic diseases, and for that reason an early operation

would be advisable as the lung, after a late operation cannot be perfectly expanded again. Evans advises the early operation especially in cases where the exudate comes stealthily and without constitutional disturbances and is only discovered through physical examination, cases which especially defy medical treatment.

The operation is very easy. The patient is put in a half-sitting position and the thrusting-in is made in the posterior axillary line between the seventh and ninth ribs, and if possible, nearer the lower than the upper rib to avoid the artery.

It is not necessary to use chloroform as the operation is not very painful. Different instruments have been invented, which I shall not mention, but confine myself to the instrument we use in Denmark, and that unites moderate cost with solidity and simplicity. It consists of a trocar, united with a glass syringe by a rubber tube, on which we have a double cock. When the trocar has been introduced, and the stylet is to be taken out, the patient must stop breathing for a moment, till you have united the rubber tube with the trocar, that no air shall come by the inspiration, into the cavity of the pleura. For the rest, the apparatus explains itself.

When all fluid has been drawn out the little wound must be closed with a piece of plaster or collodium.

During the evacuation of the cavity, generally strong attacks of coughing come on which can be relieved by giving, before the operation, a subcutaneous injection of morphine. I remember also to have seen and read that a copious, thin, albuminous expectoration often follows the operation, but shall not try to explain this phenomenon.

Lastly I will take the liberty to report a case I have had under treatment. The patient, Mr. Glass, forty-five years of age, has never before had any disease of the lungs. On the 27th of December, 1875, I saw him in his home after having for some time previously treated him for lumbago, and he complained then of pains in his right side, especially on deep inspirations, but as physical examination did not show anything abnormal and the patient had no fever, I considered the case to be pleurodynia, and treated it with derivatives. The pain continued however without change, he

lost his appetite, felt thirst, but had very little fever, the temperature never being over 99° F.

On the third of January, 1878, distinct signs of pleurisy were first discovered. The percussion was dull, in front from fifth rib, behind almost from the angle of the scapula, the respiration and vibrations of voice were heard and felt weakened, no expectoration or sign of pneumonia. The pulse was 100, there was no increase of temperature.

During the following days the exudate increased, so that on the 9th of January it reached in front to the third rib, behind to the spine of the scapula, and the respiration was inaudible over the dull parts. The general health had grown worse, he did not take any nourishment, was very short of breath and uneasy. I therefore performed—Dr. Hopkins being present—thoracentesis, by which fully two quarts of sero-fibinous, slightly hemorrhagic exudate was removed. Immediately after the operation, the percussion became almost clear and the respiration was heard vesicular to the base of the lung; the vibrations of the voice also, could now be felt, the patient felt much relieved and breathed more easily.

The following days the exudate increased again, but only in a very little degree, so that the percussion never was perfectly dull to the angle of the scapula and so that the respiration and the vibrations were heard and felt to the base of the lung, but not so distinct as on the left side.

He commenced to have appetite, could sleep during the nights, the pain in the side decreased, especially after the application of a vesicatory, and he gained strength every day. From the 14th of January the dullness on percussion commenced gradually to decrease again, the respiration was heard more and more distinctly, and on the 22d of January he was able to leave the bed, all signs of pleurisy having almost disappeared.

We have then here a case of acute serous pleurisy, that came stealthily and only was discovered by the physical examination, a case that probably would have taken many weeks, if not months, for resorption without operation, even supposing this could have been accomplished.

The operation was performed on the sixth day of the disease, and the case terminated in almost immediate recovery.

I have often seen the same result following this operation, and never saw any bad effect of the operation, and I therefore feel inclined to operate early and believe, the earlier the better.

I do not believe you can operate too early, but you may operate too late.

Before the publication of this paper another case of pleuresy occurred in my practice which I treated in the same way, and reported in the April meeting, and as this case, in my opinion, especially shows the value of the thoracentesis as a curative operation, I will take the liberty to add it here. The patient, Mr. Casey, 39 years of age, consulted me on the 10th of March, 1876. He has always enjoyed good health and does not think he has ever been sick. His disease commenced about twenty days previously with pain and stitch in the left side, a little cough with bronchitic expectoration, some shortening of breath and with only little fever, so that he had not been obliged at all to keep his bed. The pain in the side decreased gradually, but the shortening of breath increased slowly, but so much but that he, on the 10th of March, was able to walk from his house to me and back again, a distance of more than two miles.

At the examination I found dull percussion, behind from the midst of the regio infrascapular, in front from fifth rib, and slight tympanitic percussion below the collar-bone.

The respirations and vibrations of voice were heard and felt much weakened, almost inaudible, over the dull parts. He had no expectoration, no rales were heard, he made thirty-two inspirations in a minute. I advised him to have thoracentesis performed but he would not consent. After having, for the following six days, been treated by another physician, who advised him by no means to have this operation performed, he came back to me on the 16th of March, 1876, and declared he should have the operation performed as he felt worse and worse, but still that day he was able to walk, in very bad weather, to me and back again.

The shortening of breath had increased a little, he made thirty-six inspirations in a minute, but the percussion was now dull

behind to the spine of the scapula, in front to the second rib, and the respirations and vibrations of voice were perfectly inaudible over the dull parts. The pulse was 100, the temperature 98°, the heart displaced. The next day, the 17th of March, I performed thoracentesis—Drs. Hopkins and Fowler being present—by which fully three quarts and a half i. e. 3500 cub. cent. sero-fibrinous exudate were removed. The exudate coagulated immediately after the removal. He felt better after the operation, the percussion became perfectly clear in front, and almost clear behind, and the respirations were heard to the base of the lung, but a little weakened, the vibrations of voice were also felt, but weakened.

He coughed some during the following night, but except that he felt comfortable. The next day, the 18th of March, he made only twenty inspirations in a minute, he had no fever, the pulse was 96, the percussion and the respirations as the day before, the heart in its right place. A soft friction sound was heard for some days. From the 18th of March to the 31st of March, on which day he was able to leave his bed, he gained strength rapidly; he had not a single time fever, the temperature never being over 98°, the cough ceased gradually, the percussion became almost clear in the regio infrascapularis, the respirations and vibrations of voice became nearer and nearer normal, and on the 31st of March the only sign of his disease was a slight dullness in the lower part of the regio infrascapularis.

In my opinion, this case shows that this operation is, or at any rate can be, curative, and I myself have not the slightest doubt that I have cured the patient by aid of the operation. I cannot deny that he might have recovered without the operation, but it would by such a copious and still increasing exudate at any rate have taken months, and by the operation he recovered in fourteen days, and avoided all the dangers that follow this disease when it is protracted.

The result in these two cases is at any rate encouraging, and I myself will perform the operation as often as I get an opportunity.

ART. IV.—*Abstract of the Proceedings of the Buffalo Medical Association.* Tuesday evening, March 7, 1876.

The Vice-President, Dr. Wyckoff, in the chair. Present—Drs. Cronyn, Howe Mynter, Samo, O'Brien, Lothrop, Bartlett, Briggs, Hopkins and Brush. By invitation, Dr. Baker. Minutes read and approved. Applications for membership were received from Drs. S. S. Green, W. H. Slacer, W. C. Earl and S. G. Dorr.

On motion of Dr. Cronyn the paper read by Dr. Mynter at the February meeting was taken from the table for discussion. (See Art. III., Page 377).

DR. CRONYN said that he believed the point intended to be made by the author was the value and advisability of early paracentesis without waiting for absorption or empyema. He believed this to be an important question, and one that demanded serious consideration. He spoke of the difficulty of always recognizing the presence of the fluid, and the dangers which might arise in a mistaken diagnosis. Mr. Waters, of London, had written a paper upon this very subject, his views were that when the pleural cavity was full, and there was considerable constitutional disturbance, with dyspnoea, immediate measures should be taken for the relief of the patient. He warns younger surgeons of the fact that death may suddenly occur during the operation, but does not give the cause for such an occurrence. Before making the operation the surgeon should satisfy himself that absorption can not be promoted by other means.

DR. BARTLETT said that this was a subject which required careful consideration. A careful and accurate diagnosis should be made in the first place, the surgeon should also satisfy himself that his operation was not in danger of aggravating the condition of the patient rather than relieving it. His experience thus far had been chiefly with an expectant treatment, the employment of diuretics and mercurials.

DR. MYNTER said that he had very little to add to what he had said in his paper. He thought that there was but very little danger in the operation, certainly not more than waiting. When the physician waits for the fluid to be carried off by the slow process

of absorption, the lung is often so compressed that it cannot expand, as a result of which, we have chronic pneumonia, phthisis, etc. The patient referred to in the paper read at the last meeting, was now perfectly well of his pleurisy.

It is perhaps difficult at times to diagnose these cases with certainty, but even if the diagnosis is not accurate, the introduction of the small clean trocar of the aspirator cannot be productive of much harm should the lung even be punctured.

DR. HOPKINS said that it occurred to him that we should be careful to separate in our minds the operation proposed by Dr. Mynter and the operation for the relief of empyema. Dr. Mynter proposes to operate for the cure of pleuritic effusions in the early days of the disease, and on purely theoretical grounds his operation was plausible.

DR. CROFTY said that in Dr. Mynter's operation as well as in that for empyema, relief was what was intended at first, cure might perhaps be expected, but he thought the primary object of the operation was to relieve the patient.

DR. MYNTER replied that of course he expected to relieve the patient but that he proposed to operate with an idea of accomplishing a cure.

DR. CROFTY said that he thought that Dr. Mynter did not intend to recommend this operation unless there was some imperative necessity for the removal of the fluid, as dyspnoea, too great compression of the lungs, etc.

DR. MYNTER said that in the case reported the operation was made as a curative measure, not as a palliative. The condition of the patient was not such as demanded any immediate means for relief. Had it been desirable there was sufficient time for the employment of other means.

DR. BARTLETT said, that in the consideration of this subject, we should, if possible, take into account the question of how many cases recover in ordinary medical practice. We should ask ourselves whether a reasonably large proportion of cases do not recover under ordinary treatment before adopting an operation which must be attended by some danger. He spoke now of its employment as a curative measure in ordinary cases; of course where

the accumulation of fluid was rapid or from the large amount present, the patient was in danger from great dyspnoea, it was the only resource left.

DR. WYCKOFF said that he had never seen any very unfavorable results follow an early operation. He had operated on different occasions but always as a palliative measure. In a large number of cases the effusion which came on after the operation was as great or greater than before, and necessitated another operation. He should not operate in cases where the effusion was slight or when the breathing and general condition of the patient was not badly affected.

DR. CRONYN said that it was always his advice to his younger brethren in the profession never to perform any operation of any magnitude or risk without the co-operation and advice of some older medical man. The slightest operations, even if the diagnosis, etc., were correct, might be followed by serious results and the presence of older and more experienced practitioners would be desirable as a protective measure.

DR. WYCKOFF said that the character of the fluid in cases of the kind under discussion could be very easily ascertained by the use of the ordinary hypodermic syringe.

DR. HOPKINS, spoke of a case of hip-joint disease, of about three months duration, in which the head of the bone was dislocated forward and under Poupart's ligament. The limb is drawn backward and outwards, and fixed in that position. The dislocation was of about three weeks standing.

DR. CRONYN said that dislocations of the head of the bone in hip-joint diseases were liable to occur in almost any direction. Dr. Harrington brought to the Sisters Hospital, some time since, a little boy with dislocation of the head of the femur upon the dorsum of the ilium, as result of disease. The dislocation was reduced, and proper retentive apparatus applied. At last accounts the patient was doing well.

DR. BRUSH said that it would seem to him that the cases in which the disease had reached such a point as to render dislocation liable were rare, in which reduction would be productive of any beneficial results. He related a case seen by him, in charge of Dr. J. F. Miner, in which the head of the bone was dislocated upon the pubis.

The disease, a result of injury, had existed for some years. Several sinuses lead down to the bone, the head and neck of which were denuded and roughened. Dr. Miner exsected the head and two inches of the shaft. The operation was undertaken as a last resort, the patient, a young man twenty-four years of age, having tried all other means of treatment before submitting to exsection. After the removal of the head of the femur immediate relief was experienced by the patient, his appetite improved, the discharge, became less, and for a time he improved rapidly. He died at the end of about two weeks from acute peritonitis, probably the result of an abscess opening into the pelvic cavity. The result of exsection of the hip-joint are often surprising. Dr. Sayre, who has had the largest experience of any man in this country if not in the world, has, in over fifty cases, met with a large percentage of success.*

DR. BARTLETT asked in regard to the employment of the extension splints of Sayre and Taylor.

DR. BRUSH, replied that if properly applied at the right period of the disease they prevented further extension of the disease and frequently their use resulted in a cure.

DR. O'BRIEN, in reply to a question as to the prevailing diseases, reported seven cases of small pox only. One in Folsom Street, one on Delevan Avenue beyond Cold Spring and five in the pest house. No special disease seemed to be prevailing.

DR. HOWE spoke in reference to myopia in school children. He referred to the investigations of Donders, Agnew, Williams and others, and said that he proposed to make similar investigations in Buffalo.

DR. LOTHROP moved that the Association endorse Dr. Howe in his investigations, and that he be requested to report the result of his labors to this Association at some future meeting. Carried.

On motion the Association adjourned.

* In a work on Orthopedic Surgery and Diseases of the Joints, just issued by Dr. Sayre, he gives the result of fifty-nine exsections of the hip-joint made by him, as follows:—Whole number of cases fifty-nine, of which thirty-nine are still alive. Of the twenty who died eight had recovered from the operation some time previous to death, which was caused by some disease foreign to the operation; four of the remaining twelve died of some acute intercurrent disease, tetanus, double pneumonia, dysentery and sun-stroke, leaving but eight who died from the exhaustive effect of hip disease.

Of the thirty-nine still alive, twenty recovered with motion and less than one inch shortening; eight recovered with motion and more than one inch shortening; two recovered with ankylosis, and nine are still under treatment, with every prospect of good results.

MISCELLANEOUS.

The Operative Treatment of Pleuritic Exudations.

"An important contribution on this subject appears in the the recent volume of the 'Berlin Charite Reports' (*Charite Annalen*, edited by Dr. Mehlhausen; Hirschwald's, Berlin, 1876, pp. 762). It is from the pen of Dr. Ewald, and is founded on the observation of 250 cases which were admitted into the medical clinical wards of Professor Frerichs during a period of fifteen years, from June 1, 1860 to June 1, 1875. This question is raised less with a view to the recording of individual cases of serous effusion which have been successfully aspirated, or of purulent cases which have been successfully and freely opened, but rather in the view of laying before the profession the results of a large number of cases treated by the same individual under similar circumstances and surroundings, and during a given period of years. Unfortunately, such statistics are comparatively rare, though a considerable number of single cases are scattered throughout the extensive literature bearing on this subject. Dr. Ewald sets out with the assumption 'that there are cases in which the timely and artificial evacuation of the collected fluid alone can save from an either directly or indirectly unfavorable termination.'

It is in the hope of contributing some reliable data as to the 'when' and the 'how' this interference shall be most aptly exercised that the author has undertaken a publication, which we shall now proceed to consider. Of the 250 cases 204 were cases of serous effusion. We will take these first. It appears that during the years 1860-70 no cases of serous effusion were tapped, but were treated on general principles. The figures do not include some complicated cases in which the effusion was due either to tuberculosis or cancer, such cases being quite outside the question of surgical treatment. He deducts, also, some of the slighter cases, about which there never was any question of mechanical interference; and in this way the numbers are reduced to 143 cases with four deaths, during a period of fifteen years. As before said, serous effusions were not tapped previous to the year 1870, but between this date and 1875 twenty-six of the cases were tapped, all recovering. This small proportion of operated cases will at once show that only in certain cases was interference considered desirable; and, indeed, the following are his two chief indications: First, danger to life from pressure on vital organs; secondly, the apparent uselessness of drugs, if, after a three weeks' trial, they have failed to carry off the effusion. Con-

cerning the first indication authors are fairly unanimous, but less so with regard to the second, the chief differences of opinion being as to the re-collection of fluid after tapping, its tendency to become purulent, and the actual capability of the lung to expand. As regards the re-collection of fluid after tapping, this our author considers as dependent on the time at which the tapping is performed; if it be done while the pleura has a natural tendency to exudation, tapping can in no way modify it—may possibly even increase it; for, as Wintrich says, tapping only draws off a product of disease, and not the disease itself. The indication, therefore, is to wait until physical examination determines the height of the disease, as judged by a standstill of the previously increasing dullness, which generally takes place in the third or fourth week. The tendency to become purulent is generally ascribed to two chief causes—first, directly to the operation; and, secondly, to the determining influence of the draining away of the fluid. Dr. Ewald, however, takes another view. Of thirty-five cases nine became purulent, but of these four times the fluid was turbid from the first, in one a canula was purposely left in the chest, and in the remaining four the operation was done much earlier than he now advises. The other cases, twenty-six in number, were tapped after the fourth week, and all continued serous throughout. In face of these facts, he considers himself justified in formulating that tapping does not tend to the conversion of a serous into a purulent pleurisy, provided due care be exercised in the time and mode of operating, the proper disinfection of the instruments used, and in carefully excluding air from the chest.

There can be no doubt as Trousseau has shown, that certain exudations tend of themselves to become purulent in time. It is especially the case in secondary pleurisies; and so, if from necessity the fluid has been drawn off early, while still serous, its becoming purulent at a latter stage must be ascribed rather to a natural pathological process than to the operation of thoracentesis. Next comes the question, After how long will a compressed lung re-expand? Authors vary on this point, and some exceptional cases, no doubt, show that even after a six month's compression the lung may unfold and regain its normal proportions. As a rule, however, one may state eight weeks as the average time; the date of the first tapping and the amount of the evacuated fluid being factors of no small moment in the estimation of this point. Dr. Ewald lays considerable stress on the mode of operating; he disapproves of the so-called suction instruments, as uncertain and unequal in action. As a rule, it is best to trust to the pressure from within, and only in some rare cases, when the fluid is viscid or thick, to apply a gentle suction. Deep inspirations, by expanding the lung, will generally force out as much of the fluid as it is wise or proper to withdraw; and it not unfrequently happens, should any be left behind, that it is shortly reabsorbed. He has only had

one case in which the albuminous expectoration prescribed by Terillon was present.

Passing on to the consideration of purulent effusions, Dr. Ewald begins by reaffirming his opinion that these cases, which seems to have become purulent in consequence of tapping, really contained within themselves the elements of purulency. He especially cautions us to shake our patient before making the trial puncture, lest, owing to position, the solid elements of the pus may have gravitated to the lowest part of the cavity, leaving only a serous supernatant fluid, which would infallibly mislead us if we trusted to it. He considers it all important to find out as early as possible the real nature of the exudation, and counsels the use of a hypodermic or similar syringe for exploration in all cases. "We have punctured," says he, "in hundreds of cases, and have gone into both liver and lung—sometimes on purpose, sometimes accidentally—and have never once seen the slightest harm result therefrom." Great stress is laid on the necessity for absolute cleanliness and the desirability of soaking one's needle in carbolic acid solution just before using it. As to the period at which pus is formed, he gives one case where it was found on the fifth day of the illness; another on the seventh day. Then, as to treatment, some interesting statistics are given, showing that out of forty six cases twenty-six were freely opened, with 12 deaths (46.15 per cent.); nine were aspirated, with seven deaths (77.77 per cent.); and eleven were treated therapeutically, with seven deaths (63.63 per cent.); The first two included the *empyemata necessitatis* (spontaneously opened empyemata), which were naturally not included in the third series. Or, from another point of view, excluding the *empyemata necessitatis*, he gives twenty-one cases freely, opened, with ten deaths (47.74 per cent.); eight cases aspirated with six deaths (75.00 per cent.); and seventeen cases (including the *empyemata necessitatis*) treated medicinally, with ten deaths (58.82 per cent.). These figures speak for themselves, and it will be at once inferred that the author strongly advocates a free incision so soon as the diagnosis of pus is established.

Concerning the duration of the disease, he points out the cases which were operated on had an average duration of six to nine months, as against five to six of the non-operated ones; and that the mortality increases in ratio direct with the length of time which is allowed to elapse between the commencement of the disease and the surgical treatment; also, that in young patients recovery is more frequent and more complete than in older ones.

Aspiration of the chest is not considered satisfactory, because, under ordinary circumstances, it is not possible to get rid of all the pus collected unless air be admitted; and partial evacuation is more or less useless, for the same reason that the partial evacuation of an external abscess would be considered insufficient. The

author, as a result of his own observations, then, considers that a free opening into the chest, as soon as the diagnosis is definitely made, offers the best chance for the patient's recovery.

A free exit for the pus may be secured; and he advises that, if other means fail, Roser's method of resecting a portion of rib should be adopted. The chest-cavity at first is to be washed out twice a day, and afterwards once a day, with such solutions (carbolic acid, Condy's fluid, iodine, iodide of potassium, etc.) as circumstances may suggest, and such constitutional remedies as may seem indicated are to be prescribed.

From what has been said, therefore, it will be seen that there is a wide difference in the results of treatment in these two diseases, and it is to be regretted that they are not alike favorable. Perhaps some will be disappointed in the conclusions which have been drawn concerning purulent effusion into the chest, as to its mortality under any method of treatment, but especially when treated by the method of aspiration. Still it is a fact that only about 7 per cent. recover, and some few of these even are doubtful as to their final condition. The cases in which the chest is freely opened do best, and even then only about one-half recover.—*Med. Times and Gaz.*, April 1, 1876.

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Non-identity of Croup and Diphtheria as shown in their Pathological and Histological Anatomy.

“Notwithstanding the high authorities who maintain the identity of these diseases, we have always inclined to the belief, both from their clinical and therapeutic characters, that they are distinct affections. Mr. John Moir in an interesting article (*British Med. Journ.*, March 18, 1876), maintains their non-identity, founded on their pathological and histological anatomy. ‘Recent investigations,’ he says, ‘prove that in both croup and diphtheria the membrane consists largely of corpuscles; but Dr. Carpenter warns us, that ‘it has been too much the habit of pathologists to speak of “coagulable” or “plastic” lymph as if it were always one and the same thing; yet it really presents various gradations of character, which are manifested in its different degrees of organizability, and in the diverse nature of the tissues developed from it.’ Sir James Paget points out two typical forms, the fibrinous and the corpuscular, between which the others are intermediate; and I hold that the membrane of diphtheria partakes more of the fibrinous, and that of croup of the corpuscular character. The fibrous exudations coagulate into a fibrous clot resembling that of healthy blood, but showing a more distinct fibrillation; the latter (the

croupous exudation of Rokitsky) is characterized by the want of any proper coagulation, the fibrous clot being replaced by an aggregation of cells, which in their first appearance resemble very nearly the primordial condition of the corpuscles of the fluids of the absorbent vessels and the colorless corpuscles of the blood. In the "croupous exudation," the false membrane is not plastic, to no extent fibrinous even, but very largely corpuscular. Rindfleisch, the most recent observer, says 'it is not fibrinous at all, but only apparently so.' Moreover it is usually thin and soft below the larynx; about the middle of the windpipe, more dense and firm; lower down, generally looser again, pulpy and broken into flat or tubular fragments, and never connected by blood-vessels with the surface from which it proceeds; it can be entirely detached, often with but little difficulty; in fine it is more brittle, less fibrinous, and much more albuminous than the usual products of inflammation. Mr. Campbell de Morgan, in a letter I received from him on this subject four or five years ago, after stating his belief in the non-identity of croup and diphtheria, says: 'There is no evidence that any development goes on in the false membranes; the moment they are exuded they are virtually dead; whereas in morbid growths, properly so-called, there is a constant development going on in the new tissue.' We find, then, that the corpuscular is the lowest form of the 'exudation of lymph.' Diphtheria and croup are both in their false membranes forms of this nature, though not and never in an exactly similar degree; croup being a lower form, and, therefore, less organizable than the other.

"Mr. J. Werrington Haward, from his observations in St. George's Hospital and elsewhere, states his belief that 'there are two distinct combinations of symptoms, with their associated pathological changes, to one of which may be given the name of croup, to the other diphtheria; that these combinations are constant; and that the elements and terms of the one are never mixed with those of the other (though there may be certain added qualities common to both); that the constant combinations are of the important and essential elements in each quantity; and that these are always occurring in the same and distinct association. There is sufficient ground for regarding each of the two diseases made up of these elements as distinct and non-identical.'

"Mr. Campbell De Morgan expresses no doubt that in these cases the blood is diseased, and in different manners, and there is an exudation of special fibrinous material' (that is, fibrinous material special to diphtheria) 'and of white blood-corpuscles more or less changed' (in croup).

According to Prof. Sanders, of Edinburgh, "the essential difference between the croupous and diphtheritic membranes lies in this, that the croupous membrane effects the epithelial investment of the mucous surface, whilst the diphtheritic is not confined to the surface, but is a product of the entire thickness of the mucous

membrane.' And here we have the true physiological explanation of the interesting clinical fact that, whereas in diphtheria there are often epistaxis and bloody expectoration, these never occur in croup. Dr. Sanders is not alone in his observations; in Germany, similar anatomical distinctions are the basis on which the distinctive differences between the two diseases are rightly founded. The *Lancet* of March 27, 1873, states that 'the exudation in diphtheria varies very much, and is decidedly distinct from that of idiopathic croup.' M. G. S. Empis also, in his observations at the Hopital Necker in 1848, had noticed, and in 1850, in the *Archives Generales de Medecine*, very distinctly enunciated, that 'the mucous membrane of the trachea is the only part where we have observed pellicles adherent to the mucous membrane, without the latter having been denuded of its epithelium. On whatever other part I may have had occasion to study diphtheria, whether on the mucous membrane, the lips, the tongue, the pharynx, the nasal fossæ, the vulva, etc., the mucous basement membrane was found in contact with the false membrane and the epithelium no longer existed.' Here we have a close agreement, closer could not be, between two independent and trustworthy observers, Empis and Sanders; and not to be too long, I will only bring forward one other, whose competency will be at once acknowledged by all, Mr. Jabez Hogg, President of the London Microscopical Society, and surgeon to the Royal Westminster Ophthalmic Hospital.

'This important difference between a fibrillated membrane prone to pass rapidly into the ulcerative process,' and 'a delicate film' which never penetrates to the deeper structures, and is thrown off very soon after formation, seems to have occurred to no one. 'I maintain that a sharp line can be drawn between the histological anatomy of diphtheritic membranes and croupous casts; and, surely, if so, it will no longer be denied that they indicate perfectly distinct and specific forms of disease. I will first glance at the general naked-eye appearance of the tracheal membrane usually found in diphtheria. As its name implies, it is a dense, compact, yellowish-white or reddish-grey colored, well-formed mass, of from half a line to three lines in thickness. It is usually adherent to the subjacent membrane, and moulded upon it, and is more or less friable; so that on traction with forceps to detach it, it comes away piecemeal, or in a layer somewhat resembling chamois-leather. If forcibly detached a breach of continuity of surface is made, and bleeding occurs, as the mucous membrane is always much congested. Frequently, a general tumefaction and ulceration involves the muscular tissue, and suppurating points dip down to the cartilages. By no unaided effort of the patients in the extreme paroxysm will the membrane be thrown off.

"In striking contrast, the croupous cast is semitransparent, delicate, and tender to handle, somewhat gelatinous, and of a pale yellowish color, easily separable from the subjacent surface as an

imperfect cast of the part on which it is formed. It is only after the death of the patient that it is seen to be opaque, and composed of more than one layer. It is generally thrown off during a violent fit of coughing, when the patient finds almost immediate relief from the more urgent symptoms. It is never found so intimately connected with the subjacent mucous membrane as to cause bleeding. It is simply a clean cast of the superficial epithelial layer, closely resembling the cast-off skin shed by some of the lower animals—the growing amphibia, for example.

“The histological differences are much more strongly marked. Diphtheritic membrane requires a good deal of teasing out to fit it for microscopic examination. A power of 350 diametres reveals an aggregation of granular matters, nucleated epithelium, fat-molecules, and minute crystals, held together by interspersed bands of connective tissue. Muco-purulent corpuscles often entangle foreign bodies, and in throat affections, the spores of the *oidium albicans* are rapidly developed. The membrane is, in short, a laminated fibroid mass of the superficial and deeper seated structures, in a later stage involving the submucous tissues, muscles, glands, and cartilages. In sections made from various preparations, portions of all these structures have been well seen, and sometimes I have found considerable hypertrophy of the connective and fibrous tissues.

“A portion of the croupous cast, however, examined under the same power, consists of numerous cylindrical and pavement epithelial cells, granular matter, fat-corpuscles, and mucous with some occasional foreign bodies, as particles of food entangled in a protoplasmic homogeneous matrix. The columnar epithelial cells retain their cilia and are filled with clear sarcode, and nucleated. It is, therefore, surmised that these casts are not long retained; probably they are thrown off soon after their formation. Fungus spores are rarely found entangled in these films, which are characterized by an extensive cell-poliferation rather than a transudation or true exudation. Although some of the croup casts differ a good deal in color and consistency, connective or fibrous tissue never enters into their composition.

“These facts, which have been established by Mr. Hogg by repeated demonstrations under the microscope, and verified by Dr. Greenfield of St. Thomas's Hospital, account, in the most satisfactory manner, for the therapeutic value of emetics in croup, and their utter uselessness in diphtheria.

“Mr. Jabez Hogg states that, with regard to croup, there is always one point in its etiology which appears to me not to have received much attention; and yet it is of some importance, as seeming to separate it very widely from diphtheria. I refer to its peculiar hereditariness. I have seen several marked instances of this; and I am now attending a family for an affection (strumous) of the eye, in which croup has gone down to the third generation,

affecting the males of the family in particular. No one ever heard of diphtheria having been transmitted from father to son, or from mother to daughter, that I am aware of."—*Monthly Abstract*.

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Editorial.

Preliminary Education of Medical Students.

We clip the following from the Annual Announcement of the Buffalo Medical College for the session of 1876-'77:

"Upon Matriculating, students will be required to pass an examination which shall exhibit evidence of possessing that preliminary education necessary to the intelligent discharge of a Physician's duties.

"Certificates of attendance at, or graduation from Literary Colleges, Scientific Schools or Medical Colleges, or diplomas from High Schools or Academies, will exempt from this examination."

This is a step in advance which we are glad to welcome. While it will not, to some, seem a sufficiently high standard, they must remember that few reforms are accomplished at once, there are the important initiatory steps which serve as much to bring about the desired end as the grand final move. Medical students have heretofore been exempt from all inquiries as to their fitness to study medicine, and to require of them at once to pass an examination as difficult as some propose, is simply absurd, especially so when the whole profession are not united on the subject.

The examination of students entering upon the study of medicine should properly belong to the colleges. Where this is not enforced, the next best move in advance is to have it undertaken by the County Societies. The Medical Society of the State of New York has proposed, and a few County Societies under its recommendation have adopted, resolutions forbidding any member of those organizations receiving students who have not passed an examination before a board appointed by those societies. As a step forward in medical reform this is an important move; it is, however, in many respects defective. The Medical Society of the County of Erie, for instance, has a Primary Board for the examination of medical students, the societies of several of the counties in close proximity have none, it is then, perfectly evident that students from the counties where no examination is required can demand entrance to medical colleges on the same conditions as those who have a certificate of proper qualification. But, should all the societies of the State require students to appear before their Boards of Examiners, it is evident that the standard of excellence, and the strictness of the examination would vary with the different boards, and some students would

be admitted to study in evident injustice to others who had been debarred from that right.

The Primary Board of the Medical Society of the County of Erie, in their annual report presented January 11th, 1876, use the following language : *

"We must bear in mind too, that the prime object of medical schools is not to benefit the profession at large, and to promote medical science, but the pecuniary and professional advantage of their faculties. And we have no right to expect them to take an active interest in a work of reform, which if thoroughly carried out, might result to their disadvantage."

If the gentlemen who wrote that report are in earnest, we are sorry they have no higher appreciation of their professional brethren who are engaged in medical teaching. It is true there are schools of medicine, hospitals and various medical charities, which are organized solely for the purpose of advertising the medical men connected with them, and the fact is certainly to be lamented that the ardent rivalry of some, or the desire of others for advertisement has produced so many medical colleges; colleges, like a Western institution now before the profession in no enviable light, which receive students from almost any source for almost nothing, and graduate them in almost no time.

We make the assertion, however, that the majority of medical teachers, those who to-day are held in respect by the mass of the profession, will gladly welcome any move which will elevate the mental attainments of those whom they receive as students. The time is not far distant, we hope, and already some of the medical schools are making preparations for the change, when the schools will take the matter entirely out of the hands of the profession. When private preceptors will be a thing of the past. Then the student will have to pass an entrance examination to a medical college as he would to a literary college, be required to spend a definite period in the pursuit of a graded course of study under a competent board of instructors, and pass an examination which shall be alike for all colleges, and be conducted by a State Board of Examiners. In accomplishing these reforms the colleges need the support of the general profession, they appreciate the difficulties of the situation better than any class of outside "reformers" can; whose motto is most excellent, but whose motives will not merit similar praise.

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Sanitary Condition of Philadelphia.

We have received the following circular to which we direct the attention of our readers :

UNITED STATES CENTENNIAL COMMISSION. BUREAU OF MEDICAL SERVICE.

Owing to the very large number of persons who contemplate a visit to Philadelphia during the coming summer, it seems important that the utmost publicity should be given to all facts bearing on the sanitary condition of the city.

* Transactions of the Medical Society of the County of Erie, Buffalo, 1876. Pamphlet.

The following statistics, which have been obtained from the most authentic sources accessible, represent the mortality in some of the chief cities of the world during the past four or five years :—

	NUMBER OF YEARS.	AVERAGE POPULATION.	AVERAGE TOTAL MORTALITY.	AVERAGE DEATH RATE PER THOUSAND.
Vienna.....	5	648,560	20,424	31.42
New York.....	5	994,458	29,601	29.93
Berlin.....	4	950,000	28,420	29.91
London.....	5	3,284,488	76,741	23.33
Paris.....	4	1,851,792	42,724	23.06
Philadelphia.....	5	744,831	16,573	22.27

While thus showing an average rate of mortality more favorable than that found in any other city containing over 500,000 inhabitants, Philadelphia has recently (1874) attained a degree of healthfulness almost unparalleled, viz.: with a population at that time of 775,000, the number of deaths was but 14,666, giving a death rate of only 19.3 per thousand. These very favorable results are largely due to the abundant and cheap water-supply, and to the opportunities given, even to the poorest citizens, for the enjoyment of pure country air in the great Fairmount Park, which contains 2,991 acres. The extent to which this is valued by the citizens may be inferred from the fact that during the year 1875, the Park was visited by over eleven million persons.

The most powerful influence of all, however, is the absence of that overcrowding of the population, which is the most fruitful source of sickness and death in many quarters of nearly all other large cities. This will be more clearly comprehended when it is remembered that the 817,488 inhabitants of Philadelphia are spread over an area of 129½ square miles, which are traversed by more than one thousand miles of streets and roads; and that the city contains, in addition to other kinds of buildings, 143,000 dwelling-houses occupied by families,—a number exceeding by over 40,000 that of any other city in America.

The climate of Philadelphia is also, on the whole, a favorable one, although presenting many of the peculiarities common to inland localities. The mean annual temperature of the last ten years is 53.73° Fahrenheit; the average annual rain-fall is about forty-five inches.

The following table exhibits the mean temperature of each month for the past ten years, showing that the range is far less extreme than is found in many other less favorably situated localities :—

Mean Temperature (Fahrenheit) of each Month during the past Ten Years.

January.....	32.78° F.	July.....	78.74° F.
February.....	33.72 "	August.....	75.92 "
March.....	39.16 "	September.....	67.72 "
April.....	53.96 "	October.....	56.03 "
May.....	62.84 "	November.....	43.34 "
June.....	73.54 "	December.....	33.92 "

It is thus seen that only during the months of June, July, and August does the mean temperature rise to a high point. During this period there are very rarely any prevailing epidemic diseases, and the chief mortality occurs among children, especially among the poorer classes.

The health of Philadelphia at present is unusually good. Timely efforts have been made to secure an abundant water-supply to meet the great increase in the demand which must be expected this summer as compared with previous years. Constant watchfulness will be exercised by the authorities to maintain cleanliness, and to avoid or remove every possible cause of disease.

Within the Exhibition grounds a rigid sanitary inspection will be maintained, under the control of the Bureau of Medical Service; and thus a guarantee will be afforded that no cause of infection or disease will be allowed to occur through neglect of this important duty.

The object of this circular has been to call attention to the unusual sanitary advantages of Philadelphia, and to the preparations which have been made to ensure the highest possible degree of healthfulness during the approaching Exhibition season. It is proposed to issue at certain intervals other circulars, announcing in an official and accurate manner the sanitary condition of the city, so that entire security may be felt by all who desire to visit the Centennial International Exhibition.

15th April, 1876.

WILLIAM PEPPER, M. D.,
Medical Director.

Meetings of Medical Societies.

The meeting of the American Medical Association is to be held in Philadelphia, Tuesday, June 6th, 1876. Dr. J. Marion Sims, President.

The annual meeting of the New York State Medical Society will be held in Albany, Tuesday, June 20th, 1876. Dr. Thos. F. Rochester, President. It is hoped there will be a full attendance. In this connection we give the following list of delegates from the New York State Medical Society to the International Medical Congress to be held at Philadelphia, Sept. 4th-9th, 1876:

Frank H. Hamilton.....	New York.	Francis Burdick.	Johnstown, Fulton Co.
B. Fordyce Barker.....	New York.	Geo. J. Fisher.....	Sing Sing.
Edward H. Parker.....	Poughkeepsie.	Harvey Jewett.....	Canandaigua.
Frederick Hyde	Cortland Village.	Ellsworth Eliot.....	New York.
Henry W. Dean... ..	Rochester.	Julius F. Miner... ..	Buffalo.
John P. Gray.....	Utica.	W. H. Bailey.....	Albany.
L. I. Teft.....	Syracuse.	E. R. Hun.....	Albany.
J. V. P. Quackenbush	Albany.	C. H. Porter.....	Albany.
James P. White.....	Buffalo.	J. Foster Jenkins.....	Yonkers.
George Burr.....	Binghamton.	A. M. Vedder.....	Schenectady.
S. O. Vanderpoel.....	Quarantine.	H. D. Didama.....	Syracuse.
G. A. Dayton.....	Mexico, Oswego Co.	E. R. Squibb.....	Brooklyn.
Wm. C. Wey.....	Elmira.	Alexander Hutchins.....	Brooklyn.
C. K. Agnew.....	New York.	H. D. Vosburg	Lyons.
B. F. Sherman... ..	Ogdensburg.	Austin Flint, Jr.. . .	New York.
E. M. Moore.....	Rochester.	John D. Button.....	Auburn.
J. C. Hutchinson.....	Brooklyn.	Thomas M. Flandreau	Rome.

The Semi-Annual Meeting of the Medical Society of the County of Erie, will be held at the Buffalo Medical College, Tuesday, June 13th, 1876. A full attendance is desirable.

Books Reviewed.

Hospital Plans. Five Essays relating, to the Construction, Organization and Management of Hospitals, contributed by their Authors for the use of the Johns Hopkins Hospital of Baltimore. New York: Wm. Wood & Co. 1875. Buffalo: H. H. Otis.

The late Johns Hopkins of Baltimore, made a bequest, which now amounts to three million of dollars, for the establishment and maintenance of a hospital in that city. To the trustees entrusted with the management of this fund he gives directions to secure the advice of those at home and abroad who have met with the greatest success in the construction and management of Hospitals. These gentlemen accordingly directed their building committee to confer with five distinguished physicians who had made hospitals their especial study. The gentlemen selected were Drs. John S. Billings, Asst. Surg. U. S. A.; Norton Folsom, Supt. of the Massachusetts Gen'l Hospital; Joseph Jones, of the University of Louisiana and visiting Physician to the Charity Hospital, New Orleans; Caspar Morris, late visiting Physician to the Episcopal Hospital, Philadelphia; and Stephen Smith of New York. The report of these gentleman, with the accompanying plans, and some plans and reports presented by Mr. John R. Niernsee, make up the volume.

The subjects of Hospital construction and administration are attracting much attention from the profession. They involve a discussion of some of the finer points of drainage, ventilation, architecture, etc., and are not to be decided in a moment. The gentleman who have contributed to the volume before us are all, from their experience in these matters, competent authorities. Our space will not allow a detailed mention of the various plans proposed. The gentlemen are all in favor of well built, substantial buildings, the temporary barrack style, which can be taken down and removed as desired, receiving no favor from them. The work we regard as one of great value, it contains a vast amount of information which can be found in no other work, and the trustees of the hospital deserve the thanks of the profession and the public for the publication of the truly elegant volume.

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Books and Pamphlets Received.

Lecture on Orthopædic Surgery and Diseases of Joints. Delivered at Bellevue Hospital Medical College, Session of 1874-75. By Lewis A. Sayre, M. D., Illustrated by 274 wood engravings. New York: D. Appleton & Co. 1876. Buffalo: Herger & Ulbrich.

Extracts from the Ninth Annual Report of the State Board of Charities of New York State, relating to Hospitals for the Sick and Insane. By M. B. Anderson and J. C. Devereux. To which is appended a Report relating to the Management of the Insane in Great Britain. By H. B. Wilbur, M. D.

Remarks on Urethral Stricture, before the British Medical Association, Aug. 5th, 1875. By F. N. Otis, M. D. of N. Y. Reprint from *British Medical Journal*, Feb. 26th, 1876.

B U F F A L O

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Original Communications.

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ART. I.—*On Albumen in the Treatment of Pulmonary Consumption.* By E. L. SHURLY, M. D., Detroit, Mich.

Written for the Buffalo Medical and Surgical Journal.

A disease so universally prevalent and disastrous among civilized nations as "Pulmonary Consumption" and one, too, which has thus far so successfully baffled the efforts of medical art in arresting its progress, must necessarily be the subject of much interest, thought and investigation, and encourage us to more vigorous pursuit after its mysterious operations. It must be conceded, that pathological investigators,—although deserving the highest praise and encouragement,—have as yet, only given us *relative* results—and nothing *absolute* as a substructure upon which to establish a rational plan of treatment for this disease; for, whether we regard phthisis as a vitiated neoplasm, an inflammation, or other of the supposed pathological processes, we are still "in the dark" regarding the selection of therapeutic measures. Hence we are com-

pelled to turn aside from this conflict of opinions and experiment, to place reliance more on the deductions from physiological, chemical and clinical data!

The following remarks in support of the plan of treatment to be suggested are almost entirely based upon the well known physiological and chemical processes connected with nutrition, processes, which to my mind, deserve the greatest consideration in the treatment, not only of this, but of all diseases.

In the first place, taking a summary physiological retrospect, we see that the animal body is not only constructed and repaired, but its living force maintained through material derived from without, called food; which by certain regular metamorphoses becomes converted to the use of the economy in sustaining the normal condition known as health; and further, that without a certain supply of this material, food, both in proper quantity and quality, the harmonious equilibrium of molecular action becomes disturbed, disease inevitably following, tending subsequently to decay.

Therefore, as living force cannot exist without material, and as "living force can generate the same amount of work as that expended in its production" (Helmholtz), it follows that a deprivation of food (whether from paucity of crude material or malassimilation) must cause a consumption of the already formed structures, so long as the living force continues its action within the body. So that, the *introduction* of the proper material for the play of life force becomes as important a factor of animal existence as the *operation* of the life force itself. Hence, it is obvious that our attention should be *concentrated* on the functions of digestion and assimilation on the one hand, and the character of the nutriment introduced on the other, while treating any wasting disease. Regarding the character of the food, physiological chemistry teaches with tolerable certainty that the four classes of elements, nitrogenous, hydro-carbons, carbo-hydrates, and inorganic, must each be represented in the food requisite for normal nutrition.

The carbo-hydrates and hydro-carbons; such as, fats, sugar and starch, are undoubtedly very important as *force producing agents*, for, as Pavy asserts, "That energy capable of resulting in the per-

formance of mechanical work is produced in the animal system by the oxidation of carbonaceous matter may be considered an established fact." Besides this, we have in support of the fact, the interesting experiments of Frankland, which prove by the number of units of heat evolved in the consumption of one gramme of each of the articles of these classes that fats take the first rank as force producing agents, thus displacing the doctrine promulgated by Liebig and for a long time accepted by the profession, that energy was especially the resultant of the direct oxidation of nitrogenous matter. The starchy and saccharine elements rank next in the tables of Frankland as force producing agents, while albumen ranks last. But, regarding the utility of these latter agents in this connection, it must be remembered that they both contribute by metamorphosis very largely to the amount of carbonaceous matter actually converted into force through oxidation, as proven by actual experiment on man and the lower animals, so that vital force, or work is by no means so dependant upon the amount of fat introduced from without as at first thought might appear.

Of course, each of the inorganic constituents of food has its particular office in the economy, but probably none are quite as useful as phosphorus, in its compounds, for it is a component of all the tissues; besides, by its presence serving an important purpose in the process of digestion. But of all the proximate principles the nitrogenous, and especially the albuminous, must be supplied in the most unvarying quantity, particularly as they are not produced within the body from a metamorphosis of either of the other classes; and regarding their importance, Lehman says, "If we pause for a moment to contemplate the great series of the chemical substrata of the animal body, we at once perceive that there are four principal groups of substances in which the vital processes are manifested with the greatest intensity. Amongst these the *albuminous substances* or the so-called protein-bodies and their *derivatives* are the most conspicuous. A mere superficial glance at the occurrence of albumen is sufficient to show that this must be one of the most important substances in the whole animal body; we have met with it in the largest quantity in the blood

and in all those animal juices which contribute directly towards the nutrition of the organs, and a more careful examination of many of the animal tissues shows that albumen requires only some slight modifications to become consolidated under different forms; as, for instance, when it contributes towards the formation of the solid contractile parts, under the form of syntonin (musclefibrin), by which alone both the voluntary and involuntary movements of the animal body are effected.

We found it both in a dissolved and an undissolved form in the most delicate organic combinations, as, for instance, in the contents of the nerve tubes, structures by which the animal essentially differs from the plant, and in which the highest force of all animal life may be said to be located," and in another place he says of albumen: "Albumen occurs in all those animal substances which supply the whole body, or individual parts of it, with the materials necessary for nutrition and the renovation of effete matters. Hence, albumen is a principal constituent of the blood, the lymph, and chyle, as well as of all serous fluids."

Thus, taking the foregoing quotations (which, it may be added, can be corroborated by many others of equal authority), from Lehman, we see albumen standing forth the most important of all, as an element of nutrition. It is this in fact that constitutes protoplasm, the germ of animal as well as vegetable life, from the Bathybius, a mere mass of jelly through the nonnuclear and nuclear or higher cell, to the most complex organism. It stands as the quintessence of cell life, and the cell is but the being in miniature. Being thus conspicuously concerned in all physiological vital actions it must necessarily be abnormally destroyed or perverted by disease processes, which involve perhaps even greater molecular action than the normal vital processes; and this seems to be proven moreover, by various analyses of the products of inflammation, fatty, tuberculous and scrofulous degenerations, showing them to be very rich in albumen, especially pus, which according to Frey is only a dead cell (a cell at rest).

Now how much of a certain disease action depends upon the misdirection, so to speak, of the vital force itself, without reference to the quantity or character of the nutriment, of course, one cannot

say, as living force is only known to us by its work and cannot be bridled and directed as electricity can. Nevertheless, if we know that its proper operation largely depends upon a supply of a certain proximate principle, as for instance albumen, and if we can then devise means of controlling or securing the introduction of this material to the system, it seems fair to infer that we shall to a certain extent be able to control the disease action itself. Thus in a wasting disease like Phthisis Pulmonalis, for instance, we must endeavor to introduce *more* than an ordinary supply of the proximate principles, especially the nitrogenous (which undoubtedly suffer the greatest destruction), that this rampant vital action may not consume the already formed and appropriated material; in other words, we must in some way supply the extra demand. But, it may be asked, how can we do this, in cases of this kind, where from want of appetite, from feeble digestion and assimilation, (almost constant accompaniments of Phthisis) we can scarcely introduce an amount of ordinary rich food requisite for healthy vital action, without producing indigestion with its reactionary disturbances. Shall we resort to tonics, or stomachics, in order to spur the feeble digestive apparatus? Not altogether, for common experience teaches that many of these cases, and I might say it of other diseases also, are really but little affected by medicine, probably because these are not absorbed in sufficient quantity from the digestive tract. Now, what it is desirable to do, is to supply some substance rich in protein, which will be readily assimilated with the least tax on the enfeebled digestive apparatus; and for accomplishing this end, meat juice, eggs, milk, cream and cod liver oil suggest themselves to one's mind, each being valuable articles of nutriment. But as meat juice and milk are not as rich in the desired albuminous principles, in proportion to bulk, as eggs, (a matter of importance as far as the stomach is concerned), and as cream and cod liver oil (being principally fats) not only require considerable expenditure of force in being prepared for assimilation, but are then chiefly valuable in aiding the metamerphosis of nitrogenous matter, rather than as elements of structure, we are bound to give our preference to eggs. Nor will this seem strange when we reflect that nature has supplied in a concentrated form in the egg (which is nearly

alike in composition for all animals) all the material necessary for the growth and development of the animal germ.

Perhaps it will not be out of place in this connection to reproduce the following tables, taken from Pavy, showing the composition of the hen's egg.

Analysis of the entire contents :

Nitrogenous matter.....	14.0
Fatty matter.....	10.0
Saline matter.....	1.5
Water.....	74.0

WHITE.

Nitrogenous matter.....	20.4
Fatty matter.....	0.0
Saline matter.....	1.6
Water.....	78.0

YOLK.

Nitrogenous matter.....	16.0
Fatty matter.....	30.7
Saline matter.....	1.3
Water.....	52.0

Thus it will be seen that the white of egg contains no fatty matter, being composed almost wholly of albumen, while the yolk is rich in both nitrogenous and fatty matter. Lehman found in an analysis of thirty (30) eggs, that the albumen averaged about 23.01 grains to each egg. Polecks' analysis is about the same. Lehman also states that he found the fresh white to contain 12.274 per cent. of albumen, and the dried white 92.293 per cent., while the yolk contained not only albumen but fat, phosphates and other salines. Thus I am convinced that eggs are not only richer, in proportion to bulk, in all the proximate principles, than any other article of human food (not even excepting milk, nature's nourishment for young mammals), but contain a greater proportion of proetein in the best condition for ready assimilation by a feeble digestive apparatus, and hence, deserve the post of honor in the treatment of Phthisis Pulmonalis and other wasting diseases.

But finding quite often that patients were unable to digest or assimilate the requisite number of eggs, owing perhaps, either to the oil contained, or the inability of the stomach to break up the intimate cell structure, I was led to present them in a dessiccated form, either entire, or just the whites, with to my observation, gratifying results. The mode of preparation is as follows: The eggs are exposed to a warm current of air, never above 110°, F. until they are thoroughly dried, when the residue will be ready for use. As it is more tedious and difficult to evaporate the whole contents, than the whites, I more often throw out the yolk, and afterwards prepare the albumen by adding a little cod liver or other oil; or, triturating it with either egg shell, or one of the phosphates, preferably calcium or sodium phosphate. *Particular attention must* be paid to its preparation, inasmuch as albumen (or dessiccated egg) prepared either by too great heat or by precipitation, whereby it is coagulated, will not yield the same results as that prepared in the manner here given, which requires it readily soluble in warm water, and capable of direct absorption as albuminose by the stomach. I have never observed an instance where it was not borne easily by the stomach when prepared by means of *gentle heat*. It may be administered in teaspoonful doses as a powder with or without one of the salts mentioned, by throwing it in warm water, light soup, or milk, or, emulsified with glycerine or cod liver oil.

Regarding the therapeutic value of eggs, as compared with cod liver oil—the standard agent—in the treatment of Pulmonary consumption, it is only necessary to say, that I was at first led to the exclusive use of eggs, by the observation that the administration of the Emul. Ol. Morrh. (made with eggs) produced more positive effects than did the oil alone, and *that* in patients who could equally well take the pure oil. It is unnecessary to add, perhaps, that the eggs must always be fresh and from hens which are properly fed. Albumen made from such eggs in the manner indicated above will keep for a great length of time without undergoing any change.

ABSTRACTS OF CASES.

I present the following abstracts of my notes of fourteen cases, for the purpose of subjecting to scrutiny the *Diagnosis*, etc., be-

lieving, however, that they record unmistakable signs in each, of the earlier stages of the various forms of *Phthisis Pulmonalis*, excepting, perhaps, that variety known as *Acute Tuberculosis*.

Of course I am well aware that some cases of Phthisis are very slow in their march, while others are undoubtedly amenable to cure through nature's unaided efforts, but as instances of the latter fact are comparatively infrequent, the question need not detain us here, neither do I presume to claim for albumen the honor of "a specific" for Phthisis, especially as I have in every instance more or less combined its use with other agents, and hygienic measures hitherto proven to be beneficial in the treatment of this disease. I simply claim that it is superior to cod liver oil, and as previously stated, the *most concentrated* and *powerful* nutriment which can be introduced practically into the wasting economy. And, although by the aid of this agent we may yet be unable to produce a radical cure in every case of incipient "Phthisis," if we can through its instrumentality prolong, for a few years, the life of a victim, its mission ought to be regarded as a valuable one.

1874, Nov. 22D. CASE 1.

T. B.—æt. 28. Clerk in R. R. office. Small stature and stooped; small thorax, widower, temperate habits excepting the use of tobacco. Parents American, family history good. Has been ailing more or less for last few years, having had rheumatism, and frequently "colds," especially during *last* year, when the colds have been more obstinate to treatment. Has on two or three occasions, during the past year, expectorated blood in considerable amount also. Now has a "hard cough" with little expectoration, dyspnœa, especially upon even moderate exercise, skin moist usually, but at times dry and feverish, appetite capricious; some indigestion; bowels constipated as a rule.

Physical signs: Percussion sound of upper left side duller than right, auscultation shows crackling and sibilant rale in both infraclavicular regions, more marked in left, and in left mammary region, with broncho-vesicular respiration elsewhere. Pharynx reddened and follicular. Treatment: R. Emul. ol. morrh. et albumen. Tablespoonful four times daily. Diet of meat and eggs, etc., and moderate exercise in open air, and to sleep always in an

apartment to which fresh air is accessible. It was omitted that a mitral lesion was discovered at the first examination for which XX. gtt. Tr. digital. three times daily was prescribed.

Jan. 8th, 1875. It is noted that the small amount of ol. morrh. which the emulsion contained, apparently disordered his stomach so that the glycerole of albumen was substituted; and also that the physical signs were rather more unfavorable, being mucous rales and crepitant rales in both upper lobes, with a more decided bronchial character to respiration.

From this time on he improved slowly and quite steadily, notwithstanding, several so-called colds had been contracted, being enabled most of the time to attend to his business duties, and in Nov., 1875, it is noted that he feels better, stronger, and is fleshier than for three years past. During this time the treatment, principally by albumen and eggs, was continued with more or less persistence.

In July, 1876, an exploration of the chest showed an absence of the adventitious sounds previously noted as emanating from the lungs, but a decided *bronchial* character (with short inspiration) to the respiration of the upper part of the left lung. He had "no cough of any amount" nor "spells of fever." Digitalis had been administered more or less for the purpose of controlling the heart's action. He is now (Dec. 8, 1876,) suffering from an attack of acute bronchitis, which is apparently giving way under the use of quinine and ammonia in addition to the other treatment.

1875, JAN. 13TH. CASE II.

Mrs. C. N. B.—æt. 36. Mother of five children who were born at intervals of eighteen months. Short stature, pale and emaciated, with now and then flushed cheeks. Well surrounded with home comforts and necessities. Has lost two sisters, besides some more distant relatives, with tuberculosis. Parents American, both dead, cause unknown. Has always been feeble, excepting for a month or two at a time. Four months ago she contracted a "cough" which has since been growing in intensity. Menstruation scanty and irregular for past year. Has pain in left side of thorax, cough and expectoration, sometimes mixed with blood,

fever and sweating at night. Little appetite, some indigestion, constipation. Says she is rapidly growing weaker, and emaciating.

Physical signs: Percussion sound duller in upper left front. Auscultation shows, a broncho-vesicular character to respiratory murmur, prolonged and jerky expiration with dry crackling in both supra and infra-clavicular region. Upon forced inspiration, subcrepitant and sibilant rales.

Treatment: As she cannot bear cod liver oil well, to take of Emul. albumen et ol. morrh. a tablespoonful four times daily, and spray of carbol. acid (gr. iii. ad. ℥) from steam atomizer. Diet to consist principally of eggs, meat, etc.

Oct. 23. It is noted that she has only been holding her own. Examination revealing no positive improvement of the condition of the lungs. For the last two weeks has been suffering more from indigestion, and great pain of bowels, with diarrhoea at this time. V. gtt. ac. hydrochl. and V. gtt. Tr. nuc. vom. were prescribed to be taken three times daily in water and the Emul. ol. morrh. et. album. was substituted with the glycerole of albumen in tablespoonful doses four times daily, the diet as before to consist largely of milk and eggs. The intestinal derangement was soon relieved and she began to show signs of improvement, and Dec. 17, 1875, it is noted that she has gained considerable in weight and appearance, the cough has greatly diminished, and the physical signs show bronchial respiration in upper left lung especially with duller percussion sound and bronchophony.

She has continued improving up to this writing (Dec., 1876,) with steadiness, only while under the influence of an occasional attack of acute bronchitis, until she is now quite fleshy and feels vigorous.

[TO BE CONCLUDED IN NEXT NUMBER.]

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ART. II.—*The Hip Joint.* Paper read before the Buffalo Medical Association, May 1st, 1877, by E. R. BARNES, M. D.

In the last paper read by me before this Association, after reviewing the anatomy of the hip joint, the subject of fracture of the neck of the femur was taken up and the points alluded to in

this connection were first, the means which nature provides to guard against such accidents, and the manner in which such accidents generally occur; secondly, the periods of life within which such lesions are limited, and during which there is a greater or less liability to such injuries; thirdly, the relative frequency of extra and intra capsular fracture at different ages, with some remarks as to diagnosis between these two forms of fracture; fourthly, the kinds of union which take place after fracture of the neck; fifthly, the symptoms of this fracture, with such explanation as could be briefly presented, of the causes of these symptoms; and lastly, a reference to the treatment as derived from the previous considerations.

Before passing to the subject of the dislocation of the hip joint, I wish to call attention to a condition which closely simulates some forms of fracture. A severe blow, which does not produce a fracture, may occasion much pain and tenderness about the joint, with temporary muscular paralysis, and inflammatory action may be induced which will result in interstitial absorption of the neck of the bone, and ultimately, shortening and perhaps eversion of the limb. Chronic rheumatic arthritis may induce similar changes, but the history of the case would distinguish this condition. Like changes may also take place after a limb, which has been dislocated, has been reduced, so that shortening may ensue, although the head of the femur may have been restored to its proper place. Nature has provided against dislocation of the hip joint by the deep socket in which the head of the bone rests, and by the powerful ligaments and muscles which combine to hold the bone in place. Yet, owing to the variety of movements of which the joint is capable, the weight to which it is or may be subjected, and the powerful leverage afforded by the shaft of the thigh bone, or by the extended limb, this joint more frequently suffers dislocation than any other excepting that at the shoulder.

Dislocation of this joint is nearly always occasioned by great force. It may occur at any age, and has even been known to result from causes acting during intra-uterine life. Where there is no period between infancy and extreme age within which it has not been known to occur, yet, as might be expected, from the

statement that this accident is usually produced by great force, we find that its period of greatest frequency is during the most active time of life, that is between twenty and forty-five years of age, and that it is much more common in the male than in the female. In these respects there is a marked difference between fracture and dislocation.

The position of the limb is also an important factor in supplying the conditions necessary to produce this lesion. More or less flexion of the thigh upon the pelvis, together with powerful adduction of the limb, are probably conditions precedent to the production of the upward and backward dislocations, and if we add to this, inversion, we have all the conditions under which a strong force, acting through a powerful leverage, may pry the head of the femur from its socket, causing it to rupture the ligamentum tires and the posterior portion of the capsule, and to emerge into a new and abnormal position. These conditions being induced by a fall from a height upon the floor, or upon the outer side of the knee. The dislocation upon the *dorsum ilii*, may occur, and that commonly described as into the ischiatic notch. If the thigh is at right angles to the pelvis, and the limb adducted when the force is applied, the head of the bone may pass directly backwards. When flexion of the thigh is carried upwards beyond a right angle, the head of the femur tends to make its exit more and more in a direction downwards and backwards towards the tuberosity of the ischium, which tendency is much favored by the simultaneous inward rotation or inversion of the limb.

Forcible abduction of the limb causes downward dislocation, whether the limb be at the same time flexed or extended. Outward rotation occurring simultaneously, greatly facilitates the escape of the head in a position of abduction, so that a slight force has been known to produce such escape, as in the case of a person stepping from a sleigh, whose foot was caught upon the edge of the vehicle and retained there until the other foot rested upon the ground, thus causing sudden but not very forcible abduction, and outward rotation of the limb, and consequent downward dislocation of the head.

We thus see that with flexion, adduction and inward rotation, the proper force being applied, the head may emerge anywhere in the circuit, from a point well up on the dorsum to the neighborhood of the tuberosity of the ischium, while with abduction, and outward rotation, the luxation downwards only is produced. These statements apply to the three dislocations included in the usual classification, as upon the dorsum, into the ischiatic notch, and into the thyroid foramen.

The mechanism of the dislocation onto the pubes is somewhat different. It is tersely described by Hamilton as being caused "by a fall upon the foot when the leg is thrown backwards behind the center of gravity;" or in other words, by a force acting from below upwards, and from behind forward, the body advancing, while the point of contact, at the foot or knee, remains stationary, or so to speak "inclines forcibly backwards," so that a powerful leverage is brought to bear to force the head forwards out of its socket, and upwards into the pubes.

Such in general are the conditions under which dislocation of the thigh may be produced, according to most authorities; either during flexion, adduction, and often inversion of the thigh, or during abduction, with perhaps outward rotation. It is highly probable, however, that the great majority of these displacements take place primarily in a direction downwards, or downwards and backwards, and that the position in which the head of the bone ultimately rests is a secondary one, being caused by the head of the bone ascending around the rim of the acetabulum, as the limb tends to resume a straight position.

It is evident, from the points referred to in this and the preceding paper, that a consideration of the age of the patient, the direction in which the force acted, and the degree of force exerted, may be of value as furnishing presumptive evidence in making a diagnosis between a dislocation of the femur at the hip, and a fracture of the neck of this bone.

It is not a part of the purpose of this paper to enter a detail of the symptoms of the different forms of dislocation, but rather to consider them as a whole, and as due to a uniform set of mechanical conditions. Sufficient to say briefly, that greater or less flex-

ion of the thigh upon the pelvis accompanies all forms of dislocation almost without exception; that adduction is characteristic of the upward and backward or dorsal dislocations, while abduction accompanies the upward and forward or pubic, and generally the downward or thyroid luxations.

Inversion exists in those cases where there is adduction, and eversion in those where there is abduction. Shortening exists in all cases, except in some of the downward displacements in which there is lengthening. An unnatural fixedness of the limb, or an insuperable passive resistance to motion in certain directions, is a characteristic of all these dislocations. When the displacement is in certain directions, as upon the pubes or upon the dorsum, the head of the bone may be felt in its abnormal position, especially upon rotating the limb. When the dislocation is upon the dorsum ilium, it is well to remember not to mistake the trochanter, rendered prominent after fracture of the neck of the femur, with shortening, of the head of the bone, a misapprehension which might readily lead to error.

We have thus far attempted to state briefly the mechanical conditions under which dislocations of the hip take place, and to give a general summary of the symptoms which accompany most of these dislocations. The next step is to consider the mechanical causes of these symptoms, and the use which may be made of such knowledge to facilitate the restoration of the displaced bone by manipulation. It is needless to state that I shall follow Dr. Bigelow in what little I shall have to say on this branch of the subject, as no other writer has so clearly illustrated, and I have prepared a cadaver on which to demonstrate the general statements already made, and those to be made.

Opinions have differed much as to whether it was to the muscles, or to the ligaments that the phenomena of dislocation were due, and as to which of these elements offered the greatest resistance to reduction. Experiments, and the introduction of anæsthetics, have contributed to the solution of this question. But omitting all historical allusion to the steps which have led to the views now generally held, it may be regarded as established that the ilio femoral ligament is the essential element in controlling the phe-

nomena of the regular dislocations, and that an intelligent knowledge of its action must guide efforts at reduction by manipulation. Dissections of cases in which dislocation has occurred, have shown that in the great majority of hip dislocations, the ilio femoral ligament remains unbroken, whatever other structures may have yielded, and that where this ligament has been torn, the characteristic features of this lesion have been lost or imperfectly presented (hence Bigelow classifies those as irregular dislocations), while on the other hand, it may be demonstrated on the cadaver that after the muscles and the remaining portion of the capsular ligament have been removed, the ilio femoral ligament alone is capable of producing the essential phenomena of the regular dislocations. If besides, the tendon of the obturator internus is allowed to remain, a demonstration of the relations of the head and neck of the femur to this tendon in some forms of dislocation may also be made. But while the action of the muscles and of untorn portions of the capsule exerts a modifying influence, and may interpose obstacles to reduction, such action is accessory and of secondary importance, so far as reduction by manipulation is concerned, provided the ilio femoral ligament is unbroken. Looking at the cadaver, we see that when the limb is extended, the branches of the ilio femoral ligament are rendered tense, and "form an unyielding suspensory band by which the femur is forcibly retained in its socket." If the limb is flexed, say at an angle of 45° , this ligament is relaxed and, the necessary conditions supplied, i. e. adduction, perhaps inversion, and force, the head slips over the acetabular rim, and seeks such a position on the dorsum as is favored by the conformation of the parts onto which it is thrown. But the ilio femoral ligament is quickly rendered tense again by this change in position, and arrests any further backward movement of the base of the neck. The consequence is that the shaft of the femur, as we see, is thrown into a position of adduction, flexion and inversion. The head of the bone is now in a position from which it can be moved in a circular direction outside of the acetabulum, from a point well up on the dorsum, around to the thyroid foranum, by flexing, circumducting and rotating the shaft of the femur in a direction opposite to that

in which it is intended that the head shall move, the base of the neck being compelled to move in the segment of a circle, of which the ilio femoral ligament is the radius, and the anterior inferior spinous process of the ilium is the center. Dr. Bigelow explains this movement in a little different language when he says that the "Y. ligamenter in firmly attaching to the base of the neck of the femur the inferior spinous process of the ilium, forms a fulcrum or pivot round which the shaft and the neck of the femur can be made to revolve like opposite spokes of a wheel." The head of the bone, as stated, can thus be made to pass around from the dorsum to the thyroid foramen, and by reversing the direction of the movement of circumduction, to pass again from the latter place to the former. The positions assumed by the limb in different stages of its progress will correspond to the symptoms of the different dislocations within this range, and similarly the symptoms of dislocation upon the pubes may be reproduced with the aid of the ilio femoral ligament alone.

It is by an intelligent consideration of the action of this ligament, that our manipulations for reduction of the regular dislocations, are to be mainly controlled.

We will briefly allude to some points as to dislocations upon the dorsum. Dr. Bigelow classes as dorsal dislocations, all those which occur within the range allowed by the "Y." ligament, from that in which the head emerges on the dorsum ilii above the obturator internus, and even higher, beneath the pyriformis, to that in which the head of the bone corresponds to the lower part of the ischiatic notch. The dislocations above the obturator internus may be primary or secondary, that is, in the first case the head may originally emerge above the obturator internus tendon, leaving that unruptured, or may be converted from a lower dislocation into the higher one, with often rupture of the small rotator muscles, including the obturator internus. This author altogether discards the usual classification which includes dislocation upon or into the ischiatic notch. He says: "I believe that no dislocation upon the ischiatic notch is worthy of the name, that no satisfactory or practical result can be based upon this dislocation alone, and that it is also an error to suppose that during reduction

the femur ever notably slips into the sciatic notch, or that the sciatic notch ever offers any obstacle to reduction." He thinks that the reason why this classification has been accorded prominence, is because unusual difficulty of reduction has been experienced when the head has been near this locality, and this difficulty has been ascribed to the head being engaged in the ischiatic notch, and that many observers finding reduction more difficult than usual, have reported cases as into the sciatic notch, which were in reality simple dorsal dislocations. He believes that the difficulties of reduction by the pulleys are due to other causes, either to the head of the femur emerging primarily above the obturator internus, leaving that unruptured, or to the head, in the act of ascending from below the tendon onto the dorsum, becoming by a movement of inversion engaged behind the tendon of that muscle, and the subjacent capsule, so that these interpose to prevent the return of the head into the socket. He therefore proposes a practical classification of dorsal dislocations, of some value in reference to reduction, viz.: first, that in which the head of the femur is engaged between the rotator muscles; and second, that in which the head is engaged behind the obturator internus tendon. In the second class of dorsal dislocations, the flexion method is sometimes absolutely required to accomplish reduction.

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ART. III.—*Buffalo Medical Club*.—E. N. BRUSH, M. D.

At the regular meeting held at the residence of Dr. MYNTER, on Wednesday evening, April 18th, Dr. S. G. DORR read a paper upon "Improvements in operations upon the cranial bones and conditions warranting the same," in which he argued in favor of two propositions, and described and exhibited a mechanical appliance for facilitating the removal or elevation of depressed portions of the skull, which he considered superior to the trephine, or any other means hitherto in use, especially for the smaller fractures.

The two propositions were: First, that all tumors of the scalp resulting from violence and presumably containing blood, pus or serum, should be at once incised; and second, that in all fractures

of the skull with recognizable depression, operative interference is required as well in simple as in compound fractures, without waiting for symptoms of compression or irritation of the brain; and further, that when there are symptoms of brain irritation without apparent depression, such interference is demanded, provided the operation can be so conducted as not to be more grave than the injury which it is intended to palliate. And he thought that the mechanical means referred to above would enable us to fulfil this provision.

In reference to the first proposition, Dr. DORR said that there is no difference of opinion about incising when the tumor contains pus, but there is great difference about the course to be pursued when the tumor contains blood. Such tumors may form beneath the occipito frontalis muscle or its aponeurosis, when they would be diffuse and fluctuating, or beneath the the pericranium, when they would be firm and unmovable. If the skull is fractured and the pericranium unruptured, the blood taking the direction of least resistance, may disseier up the dura mater and the tumor may become wholly or in part intra-cranial. Dr. DORR thinks all such tumors should be at once incised, believing that it can do no harm, that it may avert the consequences of suppuration degeneration, and that it may enable us to discover a fracture which otherwise might escape observation, deeming such knowledge of greater importance than any possible danger which might arise from thus converting a simple into a compound fracture. He quotes authorities both for and against his proposition, and presents the following statistics from the report of Surgeon General Barnes of scalp injuries during the war of the rebellion. There were:

	Cases.	Deaths.
Incised wounds of the scalp.....	282.	2.1 per cent.
Gunshot wounds of the scalp.....	7739.	1.1 " "
Contussions and lacerations of the scalp...	331.	None.

He thinks this good evidence that scalp injuries are not in themselves very dangerous, and that the mortality from incised and gunshot wounds may be largely due to undiscovered fractures, particularly of the inner table.

In support of the second proposition, Dr. DORR commented upon and illustrated by diagrams the well known fact that in depressed fracture of the skull the inner table is usually more extensively broken than the outer one, so that the edges of the inner plate are generally over-lapped by those of the outer table. He doubted whether the internal table was ever fractured except over a sinus without a corresponding fracture of the internal table; while on the other hand the inner table may be splintered while the outer is unbroken. These purely internal fractures are the most dangerous. Thus, during the war twenty cases of fracture of the internal table alone are reported, and of this number nineteen died. Dr. DORR could not understand how a diagnosis of fracture of the internal table alone could be verified during life, but he wished to state his belief in the plainest terms that where there is any recognizable depression of the external table in fractures of small extent, such cases are of the nature of internal fracture.

While the essayist admitted that it was best not to interfere locally with a fracture without depression so long as there were no symptoms of brain irritation, he presented the following figures from the Surgeon General's report. There were during the war, 2,911 fractures of both tables without known depression, of which number 64.6 per cent. died; also there were 364 cases of depressed gunshot fracture, and only 35.4 per cent. died. This result could only be accounted for in the writer's opinion, either by the neglect of surgical interference in the first class of cases, or by the effects of concussion. It is claimed by some writers that where the skull is broken and depressed, the blow is thereby deprived of a portion of its force, and what would have been concussion, if the skull had not broken in, is thereby converted into depression. Dr. DORR also quoted other figures from the same source with a view to show that less operative interference had not increased the danger from fracture of the skull, but rather that the mortality had been less when there had been such interference than when there had not.

The symptoms of compression immediately following fracture are due to mechanical causes and may be immediately relieved by elevation of the bone, but the coma or delirium following more re-

motely after simple fracture are connected more or less with inflammatory action.

In reference to mechanical improvements for operating in these cases, Dr. DOBB said that the difficulty in elevating a depressed fragment into its original position, or in removing a fragment through the external opening arose largely from the fact of the inner table being more extensively fractured than the outer one, and being overlapped by the latter. The trephine failed to obviate this difficulty and in small fractures removed too much bone, and that only at one point. The Hays saw is somewhat effective for cutting in straight lines, but as the smaller fractures are more or less curved, sometimes forming irregular circles, this instrument is of restricted use. An instrument which would readily remove the projecting outer table all around the fracture would greatly simplify and render less dangerous, either elevation or removal.

"I here show you a saucer shaped saw, or burr, with which circular cuts can be made. If the saw is more curved, the cut made with it will form a part of a smaller circle. If it is more straight, also will the cut be more straight. With this instrument the the outer table round the margin of a fracture can be cut away, and the depressed splinters loosened from their attachments to the sound bone. Small trephines or drills made of various shapes and sizes are found to be very effective. The emory or corundum wheel, I think, presents qualities which should recommend it as a useful instrument in removing bone. It will not cut flesh, with it there would be no danger of injury to any intra-cranial substance. Its fault is that it becomes rapidly fowled or glazed with blood and fat, and would require frequent cleaning or changing. In operations on the skull I think it very effective if properly made. I have been able to remove by it patches of bone from a child's skull with facility and safety from injury to other structures. The mode of driving these instruments is the same in all. I have borrowed and brought here to-night a dental engine, it being the best motive power at my command for illustrating practically the operation of the different instruments I have shown you."

The dental engine referred to is used by dentists in some of their operations upon the teeth. The mode of obtaining the power is

immaterial. Its peculiarity consists in transmitting the power by means of a flexible wire shaft, running through a flexible tube. The extremity of this tube may be held in the hand, and the little circular saw or other instrument being fixed to the end of the shaft, can be caused to rotate with rapidity and force, and can be manipulated at will.

The saw and drills penetrate bone with facility.

In the discussion of the above paper, Dr. MYNTER said that many attempts had been made to produce a circular saw fitted for surgical use but without much success. He thought the motive power suggested by Dr. DORR supplied the deficiency and might be used for many purposes, as for instance, in sequestrotomy.

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MISCELLANEOUS.

New York Medical Journal Association.

Stated Meeting April 20, 1877. Dr. CHARLES M. ALLIN, President, in the Chair.

THE ABUSE AND USE OF BROMIDES.

Dr. E. C. Seguin, in an interesting and valuable paper, discussed the above subject under two heads: 1. Bromism, or intoxication by the bromides. 2. A statement of his own method of using the bromide salts in the treatment of epilepsy and other neuroses. Since the bromides had been brought into use in the treatment of neuroses, especially hysteria and epilepsies, by Sir Charles Locock (1857), and systematized by Brown-Séquard, they had been employed in the treatment of an almost endless list of diseases and symptoms. The general use of the various bromides was largely empirical, the medicine being prescribed because of its quieting effect, and regardless of its physiological action.

Since 1867 experimental physiologists had been making researches regarding the effect of bromides upon the healthy organism, and the most important conclusions reached were two in number. By some the bromides were believed to act by causing contraction of the arterioles and consequent diminution in the amount of blood in the nervous centres; while others claimed that they affected the nervous tissues directly. There was a gen-

eral agreement, however, that the physiological result of the action of the bromides was lessened irritability of the nervous centres, especially in the motor tract.

Dr. Seguin believed that the bromides acted mainly by affecting the anatomical elements (ganglion cells chiefly) of the central nervous system. His belief was based upon physiological experiments in animals, clinical observations in man, and largely by the phenomena of bromism, which could hardly be explained by the vascular theory of the action of the bromides.

It was believed to be chiefly in consequence of the empirical notion that the bromides were indicated whenever there was excitement, aided probably by the extreme application of certain theoretical views regarding the physiological importance of changes in the amount of blood in the brain and spinal cord, that there had been, and still continued, an abuse or over-use of the various bromides. Cases were not infrequent in which a condition of impaired nutrition and nervous atony had been brought about and continued for months or years by the use of these medicines.

At this point Dr. Seguin divided his remarks into three sections: 1, concerning the general description of mild and of severe bromism; 2, respecting the complication which bromism might cause in diagnosis; and 3, with reference to the legal aspects of bromism.

VARYING DEGREES OF BROMISM.

In a number of cases Dr. Seguin had observed the following symptoms superadded to the legitimate symptoms of the disease: general debility, with weak pulse and coldness of the extremities; tendency to stupor; slight difficulty in speaking; the bromic breath, and acne. Those patients were weak, anæmic individuals, who had been taking the bromides for the relief of certain head symptoms, gratuitously supposed to be due to cerebral congestion. In some cases moderate doses of the drug had been taken for long periods of time, with frequent temporary relief to certain symptoms. All the time, however, the general condition of the patient had been kept below par, in spite of tonics and selected food. The same mild bromism had been noticed in some cases of hysteria and hystero-epilepsy, without any actual improvement. Injurious effects had been seen from the prolonged use of the bromides in the treatment of melancholia, a disease in which cerebral nutrition was quite surely lowered and perverted. Reference was made to a large class of patients who, without definite disease, suffered from nervousness, inability to sleep, queer sensations about the head, and who were inclined to constantly over-estimate their symptoms. To such patients the physician or druggist was very apt to say, "Take a dose of the bromides." It might be said that the administration of the bromides in such manner did not pro-

duce positive ill effects; but to that assertion Dr. Seguin replied by saying, *first*, that from what was known of the physiological effects of the bromides, such dosing must produce a general lowering of vitality which few patients could tolerate; and, *second*, that on principles, physicians were in duty bound to give no superfluous or non-indicated drug to their patients.

Allusion was then made to the more severe forms of bromism, in which the condition might obtain the dignity of a definite morbid state, have a clear symptomatology, a well-known course, and, as the doctor was disposed to believe, a central lesion. The symptoms of the severe forms of bromism might be so aggravated as to simulate dementia, mania, or general paralysis of the insane, and even death might ensue from debility.

Dr. Seguin drew special attention to the resemblance between bromism and general paralysis of the insane. In both there was tremor of the facial and lingual muscles, producing a peculiar vibratory speech; in both there was an uncertainty in the performance of certain movements, as walking or using the hands for fine work; in both there was failure of intellectual force and of memory. Even somewhat exalted notions, though rarely, might be present in bromism. In general paralysis there were other important symptoms, such as contraction and irregularity of the pupil, sexual excitement, peculiar epileptiform seizures, remarkable remissions in the symptoms, and often good physical health, with tense arteries; all those symptoms being absent in bromic intoxication.

Severe bromism fortunately was rarely seen except in the early stage of the treatment of obstinate epilepsy. Bromism had been proposed as a cure for the opium habit, and the paper written by Dr. Schweig, of New York, upon that subject furnished a valuable study of the severe effects of the bromides.

BROMISM AS A COMPLICATION IN DIAGNOSIS.

Under that head reference was made by Voisin. The patient had been under treatment for epilepsy, and, as his physician thought, becoming insane, was sent to Paris. He had been taking during some months bromide of potassium in doses of 90 to 120 grains. The patient was in a state of violent mania, and was removed to the asylum, where his case was looked upon by the officers of the institution as one of general paralysis of the insane. After the cessation of the bromides and the adoption of proper treatment, the man, at the end of thirteen days, was sent to his home in the country quite well.

Dr. Seguin then gave the history of a case which came under his observation, and in which the addition of bromism to the other symptoms had led to the diagnosis of cerebral lesion of the gravest kind, when really only the basal dura mater was involved. The bromides were withheld and the iodide of potassium substi-

tuted, to give the patient the benefit of a doubt regarding the presence of a specific element. The symptoms of cerebral lesion passed away in a few days, and the local symptoms gradually disappeared, except the atrophy of the optic nerve.

THE MEDICO-LEGAL ASPECT OF BROMISM.

Bromism, although it has not been brought into the courts, might at some time appear under several circumstances.

First, with reference to the responsibility of the physician administering a medicine which produced such mental and physical debility as to expose the patient to various mishaps. For instance, a patient suffering from acute bromism had fallen asleep in a railway station and was robbed of four hundred dollars.

Second, with reference to the responsibility of the patient for committing criminal acts while suffering from bromism.

It was believed to be perfectly possible for such patients to take articles not paid for, through defective memory; to be mistaken regarding the identity of persons, and thus be led to be abusive, etc.

Third, with reference to the legal capacity of brominized persons.

In some cases of bromism the stupor, loss of memory, and aphasic difficulty were so great that the patient was as truly *non compos mentis* as if he had a natural secondary dementia.

In certain cases it would be very difficult to reach a correct decision, because the judgment and general intellectum were remarkably well preserved behind a display of superficial symptoms; and it also might be difficult to determine how much of the mental impairment depended upon the patient's antecedents, and how much upon the disease for which the medicine was taken.

Fourth, with reference to the production of death through bromism. There was a possibility that the procedure might be repeated with criminal intentions; perhaps for the purpose of getting rid of an incurable invalid.

METHOD OF USING THE BROMINE SALTS IN THE TREATMENT OF EPILEPSY AND OTHER NEUROSES.

1. The prolonged use of bromides was contraindicated by congenital feebleness.

2. The bromides were well borne by persons of fairly full habit and good nervous power.

3. The bromides were indicated in cases of abnormally great irritability of the nervous system in its motor (muscular and vaso-motor, and ideational tracts).

4. The contraindications above named were to be much less regarded in the management of that formidable neurosis, epilepsy.

5. Epilepsy were regarded as the only disease which justified the deliberate production of a degree of bromism for its cure.

Dr. Seguin's method of prescribing the bromides in the treatment of a case of "idiopathic" epilepsy was the following:

Two solutions were employed.

℞ Potassii bromidi.	i.
Ammon. bromidi.	ss.
Aquæ font.	vij.
M.	

S. To be given by the teaspoonful.

And

℞ Sodii bromidi	i.
Ammon. bromidi	ss.
Aquæ font.	vij.
M.	

S. To be given by the teaspoonful.

The quantity administered was, as a rule, so divided as to give by far the largest dose in the evening. The bromide was cautiously increased, still keeping the nocturnal dose the largest, until slight bromism was produced. It was usually necessary to maintain slight bromism for months, but just as little was to be given as would prevent the attacks. The precise quantity required must be studied in each case. Children tolerated the bromides, as well as the iodides, in relatively large doses. It was regarded as important to thoroughly dilute the bromides in order to facilitate their absorption—the dose to be taken in a wineglassful or half a tumblerful of water. Under no circumstances should the bromides be discontinued; they might be *diminished*, but not *stopped* until the word *cure* could be pronounced. They should be continued at least three years after the last attack. The adjunct treatment consisted in the use of measures to prevent the acne to a certain extent, such as the occasional use of arsenic, sulphur ointments, mercurial plaster, and alkaline lotions; to correct the general debility or slight paresis, by the use of strychnia, nuxvomica, oxide of zinc, and quinia; to relieve the dizziness by the inhalation of nitrite of amyl, by stimulants, and by quinia; regulating the patient's diet and hygiene, and the use of cream, cod-liver oil, iron, quinia, phosphorus, strychnia, with nitro-muriatic acid, wine, deer, or whiskey. In certain cases such medicines as acted more directly upon the morbid state of the nervous centres were associated with the bromides, and the favorite among those was belladonna. In the treatment of cases of epilepsy in which a definite causative lesion could be made out, the bromides were used simply to combat the habit.

In the treatment of other neuroses, Dr. Seguin had used the bromides sparingly, and never continuously. Bromism should not be produced in the treatment of *hysteria*. *Delirium tremens* might probably be shortened by the free use of the bromides.

Many cases of *insomnia*, treated upon the purely hypothetical indication of causing anæmia of the brain, might be much more

quickly relieved by chloral, or by a glass of ale, or by correcting indigestion, than by the use of the bromides. Sleep was believed to be due partly to the general waste of tissues and the accumulation in the blood of the products of retrograde metamorphosis, and partly to the exhaustion of the cerebral tissue itself. The anæmia observed in the brain during sleep was regarded as a consequent phenomenon in obedience to the general law that a tissue repose in contained less blood than one in action.

In the treatment of *insanity*, the use of the bromides was recommended only to meet such indications as a tendency to epileptiform attacks, or abnormal sexual excitement, or great nervousness not caused by delusions. Favorable reference was made to the use of bromide of potassium before administering ether or opium with the view of preventing nausea and vomiting. Special attention was called to the use of bromide of ammonium in the treatment of *lary-nsthusa*—used as a gargle and to wash out the nasal passages several times a day with a weak solution of the same salt. The gargle was of the strength of $\frac{1}{2}$ i. or $\frac{3}{4}$ i. to the $\frac{7}{8}$ i. of water; the solution for the nares from 10 to 30 grains to the $\frac{7}{8}$ i. of water.—*Medical Record*.

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An Expose of Opium "Antidotes."

By J. B. MARSHALL, M. D., Brooklyn, N. Y. Read before the Medical Society of the County of Kings, Feb. 20, 1877.

At the request of the President of this Society, I have the honor of presenting an expose of a reputed "opium antidote," gotten up by a certain S. B. Collins, of La Porte, Ind.

I have recently been in correspondence with a gentleman, not unknown to literary fame, who, induced by the demands of a painful neuritic disorder, has for years been an opium habitué. What with that desire for relief which prevails suffering humanity, that distrust of self, and hesitancy to accept regular, scientific treatment, so eminently characteristic of such unfortunates, and bred by the laudatory assertions of this individual, he allowed himself to be enveigled into his hands, and after several months "treatment" awoke to the fact that he was still "in the bonds," and his exchequer depleted to the extent of nearly two hundred dollars! This gentleman very kindly furnished me with a liberal supply of this so-called "antidote" which I placed in the hands of Dr. Squibb, for analysis, to whom I return my thanks. Dr. S. being prevented from making the analysis in person, submitted it to chemists in New York, in whom he expresses confidence, who reported:—

"Result of analysis of an 'opium antidote,' received from Dr. E. R. Squibb.

Water,	28.66
Glycerine,	66.89
Cryst Sulphate of Morphia,	4.45

100.00

The sample is colored with magenta.

WALZ & STILLWELL."

This proportion of morphine amounts to *twenty-five and a half grains to the ounce*!!

Mr. Stillwell informed me that it contained nothing else in appreciable quantity.

Additional evidence is furnished by the analysis of another sample of this nostrum, made last Autumn, by Dr. Henry Carmichael, Professor of Chemistry, Bowdoin College, and Assayer to the State of Maine, who reported:

"The 'opium antidote' contains morphine,

"The morphine is combined with Sulphuric Acid,

"The Sulphate of morphine amounts to 3.2. per cent., or *fourteen grains to the ounce*"!

The same, precisely, applies to another compound prepared by "Mrs. J. A. Drollinger, formerly Mrs. S. B. Collins."

Last August, a specimen of her manufacture came into the possession of Dr. George F. French, of Portland, Maine, who brought it before the Cumberland Co. Med. Soc., which appointed a Committee to investigate. They reported:

"The Committee to whom was assigned the duty of investigating the so-called 'Opium Antidote' prepared by Mrs. J. A. Drollinger, of La Porte, Ind., beg leave to report that a sample bottle of the article, which was obtained directly from the manufacturer, was sent to Dr. E. R. Squibb, of Brooklyn, N. Y., for quantitative analysis. His onerous engagements rendered it impossible for him to conduct the investigation in person, but he sent the specimen to Messrs. Walz & Stillwell, Chemists, New York, a firm which he thoroughly confides in and endorses. So deeply interested did he become in the project, that he insisted upon bearing the expense of the analysis, in spite of the Committee's expressed unwillingness to have him assume such a tax. Walz & Stillwell report that 'this sample is glycerine colored with analine red, and containing in solution Crystallized Sulphate of Morphia, 1.383. per cent. by weight'—about *seven grains to the ounce*!

Frederick Henry Gerrish,
George F. French,
Thomas A. Foster,
Committee."

Further corroborative testimony is to be found in an interesting paper by Prof. Stanford B. Chaille, in the N. O. Med. Jour. May, 1876, regarding a gentleman who, beguiled by another of this fraternity,—J. C. Beck, of Cincinnati, had for nearly a year, been taking his nostrum, without relief, and was at last rescued by Dr. Chaille, who, with judicious treatment, restored him to health in a comparatively short time. A sample of this submitted to Mr. J. Johnson, Chemist of N. O. Charity Hospital, revealed *ten grains of Opium to the ounce!*

Collins claims to be the pioneer in this business. Since his advent, several others have come to the surface. Indiana has the van, furnishing no less than six—Collins, Drollinger, L. Meeker, D. Meeker, Bowser, Squire; Ohio, two—Beck, Wilford; Illinois, two—Carlton, Phelon; Michigan, one—Marsh. Recently, one has appeared in New York, and another in New Jersey.

I possess all their circulars, with a single exception. Their pretensions are preposterous; their falsehoods glaring.

Collins says "it is not a substitute for opium. That opium does not and cannot antidote itself, is a sufficient reply to your second query."

Drollinger avers "it does not contain opium in any of its numerous forms." Beck asserts "it has no opium in it." The *absolute falsity* of such statements, in view of the analyses presented, is too patent to call for comment.

Regarding *modus operandi*, the article is supplied in pint bottles, each supply intended to last a month. The manner of taking is a small teaspoonful four times daily—8 and 11 A. M., 3 and 8 P. M. None is furnished without a cash payment in advance, and after that at prices ranging from five to thirty dollars per month, according to the amount of opium previously consumed, and—the *facility with which they succeed in fleecing their victim*.

Such is the history of these nostrums and their venders. The wide-spread importance of the topic is obvious, and it is to be hoped this information may be given a large publicity, that, through the profession and others, opium habitués may be "warned against these widely advertised nostrums, which, while promising a safe and sure cure, only serve to increase the appetite for opium, until it finally becomes unconquerable."

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Proceedings of Norfolk District Medical Society.

Dr. Henry A. Martin presented the following report of a committee of the Norfolk District Medical Society concerning the propriety of payment being demanded for certain certificates now required gratuitously, and under penalties, by the state and municipal governments.

Your committee, appointed to determine and report what measures, if any, may properly be taken with a view to the payment of members of this society for the preparation and signature of certain certificates required by law, begs leave to say that two forms of such certificates are known to it:—

(1.) Certificates or notifications of the existence of disease dangerous to the community by reason of contagion, as small-pox, scarlet fever, and diphtheria.

(2.) Certificates of death and causes of death. It is not considered necessary to recite the statutes which make the return of such certificates obligatory. They are both required by law, disobedience to which involves a considerable penalty.

In regard to certificates of the existence of dangerous contagious diseases, the members of your committee are unanimously of the opinion that such certificates are most properly required, and should be willingly, promptly, and accurately made, on the ground of public necessity, as aid may be demanded for the suppression of a riot or the arrest of a criminal, and can be withheld only under the penalty of arrest and punishment as an accessory,—*particeps criminis*. While your committee recommends that this class of certificates should be rendered by the profession as a matter of the highest and most imperative duty, it would insist that the performance of the duty should not entail a pecuniary tax, however slight, upon him who performs it. Proper blanks should be furnished, and also stamped envelopes with printed addresses rendering them valueless for other uses. Your committee is aware that postal cards have lately been, to a limited extent, distributed for this purpose, but is of opinion that there are reasons of considerable force why these notifications should be under cover of an envelope.

The second variety of certificate, that of death and cause of death, your committee considers of very great importance, and fully agrees that such certificates should be made with the greatest care, accuracy, and promptness. For many very important reasons this last is demanded. Such service of physicians is demanded not by public necessity or safety, but for the public good, precisely as that of a juryman or witness, whose services are for the public good and may be imperatively demanded, but must be paid for. There seems to be no reason whatever why such certificates should be required under penalty of a fine, when no remuneration is afforded for the faithful performance of the required service.

That such certificates should be paid for would seem to be admitted by the payment of a certain fee to the undertaker for merely certifying death and burial. There surely is no valid reason why an undertaker should be paid for giving a certificate which requires no skill or knowledge whatever, except perhaps a very limited acquaintance with chirography, and a physician be allowed no remuneration for a similar service, requiring, when

properly performed, both skill and special knowledge, and often in no slight degree;—no reason whatever, except the usage of demanding gratuitous service from our profession, usage encouraged and developed by the facility with which the profession of medicine has rendered and does render, in a thousand ways, unpaid service to humanity.

Your committee would recommend that a form of petition be prepared, in such way as may be hereafter decided, asking from the legislature such changes in existing statutes as may enable physicians to obtain a reasonable fee for the preparation and signature of certificates of death and its cause. Your committee also recommends that the secretary be directed to communicate with the secretaries of other district societies throughout the State, which together constitute the Massachusetts Medical Society, such action as may be taken in this matter, with a request for their cooperation, to the end that the petition above recommended may be that of *all* the physicians of Massachusetts in regular standing.

Another variety of certificate, namely, those showing that individuals have been duly vaccinated, has come under the notice of your committee. Such papers are continually called for, sometimes to a degree involving great trouble and loss of time. Physicians are, however, not required to give such certificates by any statute or ordinance. The law requires that every child seeking to enter one of the public schools shall present such a certificate as a prerequisite to admission. The parents or guardians must furnish such certificates; no physician, however, except the city or town physician, where there is such a functionary, is bound to furnish them free of charge. Although in fact an immense proportion of these vaccination certificates are furnished gratuitously by physicians, there is no doubt whatever that they are entitled to a proper fee for such certificates and for the previous skilled examination essential to their proper preparation, as for any other professional labor. It would be very difficult, however, to obtain such remuneration from individuals, and as the rendering of such certificates is eminently for the public good, your committee considers that it should be paid for by the public.

The question of remuneration for certificates of vaccination is now for the consideration, under existing statutes, of the different municipal governments. Your committee is informed that some of these governments within this district have recognized the propriety of remuneration, and allow a moderate fee for each certificate of vaccination. Your committee recommends that representation be made to each municipal government, by the residents of this society residing therein, of the justice and propriety of remuneration for making out certificates of vaccination, and does not doubt that such representation will be favorably considered. It is desirable that there should be uniformity in the fee asked for,

and your committee, after careful consideration, would name fifty cents as a moderate and fit sum to be paid for each certificate, either of vaccination or of death and its cause. Your committee is, however, of opinion that such fee or any fee should only be payable by either the state or the municipal government for a careful, accurate, and prompt performance of the service required. In cases in which certificates of due vaccination should be given to children whose bodies do not present the clear characteristic mark or marks which alone can authorize such a certificate being given at all, unless after a most careful and, if necessary, repeated re-vaccination, not only would the authorities be fully justified in withholding remuneration, but also in inflicting an exemplary penalty.

In a word, your committee would most earnestly represent that all certificates from physicians should be made out carefully, accurately, fully, and promptly. All these the state has a right to expect from the members of a learned and liberal profession, and in cases where negligence, inaccuracy, ignorance, or delay is found, a perfect right also to withhold remuneration, and in extreme cases to enforce the penal clauses of the statutes. On the other hand, when such service is done with scientific accuracy and in all respects as the law requires, the profession has a right to expect and demand a moderate and reasonable payment for the service rendered to the community.

HENRY A. MARTIN, *Chairman.*

—*Boston Med. and Surg. Journal.*

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RELIEF OF PAIN BY THE OUTWARD APPLICATION OF HYDRATE OF CHLORAL.—Dr. W. B. Kesteven (*Lancet*, Feb. 10, 1877) calls attention to the benefit to be derived in the relief of pain by the external application of the hydrate of chloral. for the knowledge of which he is indebted to his friend Dr. T. S. Dowse, of the Central London Sick Asylum, Highgate. The vast field that is afforded by these metropolitan institutions for the cultivation of practical medicine is not neglected by Dr. Dowse, but is turned by him to good account. The results of the trial of hydrate of chloral as an external application have lately been given. Dr. Kesteven adds his experience of this mode of using this drug, in order that it may become widely known.

He has tried it with great success in neuralgic pains and in cancer of the breast, in cases in which other sedatives and narcotics have failed to give relief.

The mode of application is by the saturation of folds of lint of the size of the part to which it is to be used, brought into close contact, then covered with three or four layers of lint covered with oil silk or spongio-piline wrung out of hot water. The application to raw surfaces, of course, requires some care in manipulation.

The strength of the solution is about four drachms to sixteen ounces of water. The addition of a small quantity of glycerine is is advantageous. Chloride of zinc or perchloride of iron can be combined with the chloral in certain cases.

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ACTION OF GELSEMINUM SENPERVIRENS.—Dr. Sidney Ringer and Mr. Wm. Murrell have published (*Lancet*, Oct. 21, 1876) the results of a series of experiments made by them to ascertain the influence of gelseminum on the circulation. These experiments they say show:—

“1. That gelseminum produces but little, if any, effect on the pulse.

“2. That it does not affect the blood pressure.

“3. That in man it probably acts on the respiratory centre less energetically than in the lower animals.

“4. That in man it acts on the muscles of the eye, and produces other symptoms before it influences the respiratory centre.

“5. That in man it, in all probability, affects the spinal cord before the respiratory centre.

“6. That it exerts no influence on the mind, and none on the cutaneous sensibility.

“7. That it does not affect the temperature.”

—*Am. Jour. Med. Sciences.*

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BROMIDE OF POTASSIUM AS A CAUSTIC.—In a paper read at the recent meeting of the French Association for the Advancement of Science, M. Peyrand, of Dibourne, claims for bromide of potassium certain properties hitherto but slightly recognized—properties which will extend the already wide range of the therapeutical uses of this salt. He found that subcutaneous injection in rabbits of concentrated solutions of the salt led to sloughing of the skin, and from this he was led to try the value of what he considered to be the escharotic properties of bromide of potassium upon malignant and other growths, either by means of injections into the tumour or by the application of the powdered salt to a raw surface. The action of the salt is completely resisted by the tegument. His first clinical experiment on the subject took place in April, 1874, when, by means of daily applications of powdered bromide, he affected the removal, within twenty-eight days of an epitheliomatous growth on the face. He has since had equally good results from this treatment of ulcero-uticars of the legs, rapid excoriation, following the separation of sloughs produced by the application. In such cases he uses either the powder or an ointment of one part in five, or a mixture one in ten, of glycerine and the bromide. In many skin affections, as chronic eczema, pruritus, and sores, in pyoderma,

ulcerative stomatitis, and many other local inflammatory disorders, he has found it of use. As a local hæmostatic, a solution of one in fifty has served for epistaxis, and as a general hæmostatic its success in many cases of hæmoptysis and metrorrhagia was very marked, where ergot, perchloride of iron, and rhatany had failed. —*Lancet*, Sept. 30, 1876.

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Editorial.

Valuable New Books.

It will be observed that we have noticed as *Received* several valuable standard publications which we have not yet noticed in *Review*. This has occurred from the necessities of the case, our space not allowing of extended review of several new and valuable books. We omit comment upon all subjects of general outside professional interest in order to make amends so far as possible to our readers as well as medical book publishers, to whom we and the whole profession, owe so much. We hope to be able in future to give a correct and comprehensive *résumé* of all medical works published in this country or any other as soon as consistent after receiving them, and hope our readers will accept this as apology for past neglect. Those who know the situation best, will forgive us most freely.

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Meeting of the New York State Medical Society.

It is to be noticed that the Annual Meeting of the New York State Medical Society is to be held the third Tuesday of June—June 19th at 11 o'clock, A. M., in the city of Albany. It is desirable that all members and delegates should attend. We understand that the order of exercises will be determined previous to the meeting as far as it is possible to fore know what will be presented, and that thus the interest and advantage of the meeting will be greatly augmented.

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Death of Dr. Charles Winne.

A special meeting of the Erie County Medical Society was held May 11th at the Medical College, to take action on the death of Dr. Charles Winne.

The meeting was called to order by the Vice President, Dr. E. Storck, who stated its object and paid a tribute to the memory of the deceased. The following announcement was then made by Dr. John Boardman :

Mr. President and Gentlemen: It becomes my sad duty to announce to you the death of Charles Winne, which took place at 10.30 P. M., Wednesday, May 9, 1877, at his residence in this city.

Charles Winne was born in Albany, N. Y., October, 1811. At fifteen years of age he entered Union College. After he graduated he entered the office of William Bay, M. D., one well known and respected by the old residents of Albany. He was a young man of marked ability, for while yet a student he performed several surgical operations for some of the other physicians. In 1832 he was placed in their cholera hospital, the record of its mortality being much improved under his care. He received his medical degree in New York in 1833, and the same year made his home in this city. The same year commenced those public medical services which occupied so much of his lifetime. For a cholera hospital being established in an old stone building near the lake, which was destroyed not many years since, he devoted much of the summers '33 and '34, to the care of the many sick daily brought in there. The medical care at the Poor-house for a time and a surgical attendance of many years at the Buffalo Hospital of the Sisters of Charity till our these duties.

A partnership was early formed with the late Josiah Trowbridge which continued till the withdrawal of the senior partner from practice, which was renewed on his resuming his practice. Later, he was a partner, for a time, of Dr. Walter Cary.

In the fall of 1851, while performing a surgical operation at the hospital, Dr. Winne's hand became poisoned. For nine weeks his sufferings were great, and much of that time he seemed like Mahomet's coffin suspended in mid air between life and death. It was months before he was able to resume his professional duties. From that injury, in my opinion, his physical and nervous system never fully recovered.

It seems needless for me here to speak of his abilities, for we knew him. He was a man of strong will, self-reliant, to which he united a mind trained by long and constant study, quick perception, clear judgment, well read not only in medicine and surgery but he had found time to become so familiar with science, art, literature and politics that he was at home with all of them, and hardly could a subject be broached to which he could not bring clear and well-digested thoughts or opinions.

He was a gentleman of the old school, polite, dignified, rather reserved, hating duplicity or smallness, a warm friend or an open enemy, not proud or vaunting, but courteous in his manners to those he met in consultation; many times leading others in such a gentle way that his advice seemed more the suggestions of their own thoughts—yet if necessary, clear, distinct and prompt in advice.

I have known him not only to admire his judgment and medical skill, but to esteem him as a friend and adviser, and can render but a poor tribute to the man I have thought of so highly.

Dr. Boardman closed by moving that a committee of three be appointed to draft suitable resolutions.

Dr. White in seconding the motion spoke of his life and character in feeling and fitting terms.

The motion of Dr. Boardman was carried, and the chair appointed as the committee of three, Dr. John Boardman, Dr. H. N. Loomis, and Dr. John Ebuenstein.

Dr. P. H. Strong paid a feeling tribute to the memory of the deceased, and so did Dr. J. S. Trowbridge. The committee on resolutions then reported as follows:

WHEREAS, Death has removed from our midst Charles Winne, the senior member of our Society, one valued as a physician, counselor and friend.

Resolved, That in his death we deeply regret the loss of one whose industry, energy and skilled judgment have made him a pillar of strength to all those that leaned upon him.

Resolved, That we tender our sincerest sympathies to his family in this their dark hour.

Resolved, That the secretary of the Society be directed to transmit a copy of these resolutions to the family of the deceased.

The resolutions were unanimously adopted. Remarks, eulogistic of Dr. Winne, were made by Dr. H. R. Hopkins, Dr. C. C. F. Gay, Dr. J. D. Hill, and Dr. John Hauenstein. The meeting then adjourned.

At half-past four o'clock yesterday afternoon, the funeral services were held at the family residence, conducted by the Rev. Dr. Van Bokkelen, Rector of Trinity Church, and the Rev. Dr. Ingersoll of Niagara Falls. The attendance was large, including many members of the profession.

The remains were last evening taken to Albany for interment.

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Meeting of the New York State Medical Society.

It will be remembered that change was made in the time of meeting of the New York State Medical Society, at its last meeting. The Society adjourned to meet at 11 A. M., on the third Tuesday of June,—June 19th, 1877. The meetings of the State Medical Society have always been made instructive and entertaining, and physicians of New York will be interested the transactions as well as in the social opportunities thus afforded. Permanent members and delegates should not fail to attend.

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Convention of the Kentucky State Medical Society.

Dr. Baker, of Shelbyville, offered the following resolutions, which were adopted unanimously:

Resolved, That this society is in full accord with the American Medical College convention, seeking to elevate the standard of medical education in this country.

Resolved, That summer schools, which enable students to graduate after from eight to nine months' study, are exerting an evil influence upon the profession.

Resolved, That a winter and summer course by the same school, and graduation at the end of each, tends to deteriorate the standing of the medical profession.

Dr. Larrabee, after a few remarks in explanation, read the following resolutions, which were adopted:

WHEREAS, It has come to our knowledge that a bill, known as the "Morrison bill," for the discontinuance of the "tariff on quinine," is at this time before the Committee on Ways and Means, in the Congress of the United States; and whereas, the welfare of a large portion of the people in the Western States and Territories is concerned in the issue of this bill, as well as any movement which will enable them to obtain quinine at a less cost than the enormous prices now paid by the consumer; and whereas, the opposition to this bill set forth by the manufacturers and trade does not represent the desire of those who are engaged in the relief of suffering and want, but ig-

nore entirely the necessities of this large population, many of whom are engaged in cultivating the soil and opening up new resources of wealth to the Government in malarial districts; and whereas, principles of justice and humanity alike demand free quinine and an open market for the competition of European manufacturers; and whereas, we, the members of the Kentucky State Society, in convention assembled, represent the sentiments of the people of this Commonwealth upon this important subject; therefore be it resolved:

First—That we indorse the "Morrison bill," and do further pray that your honorable body will hear our petition.

Second—That a copy of these resolutions (printed) be sent to similar organizations of physicians' meetings in the various States.

Third—That these resolutions, with the signatures affixed, be furnished to our Senators and Representatives in Congress of the United States at its next meeting.

Notice was given of a number of volunteer papers to be read during the day.

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American Gynæcological Society.

The Second Annual Meeting of this Society will be held in Boston, May 30th. The President, Dr. FORDYCE BARKER of New York, will give the Annual Address.

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AMERICAN MEDICAL COLLEGES.—A meeting of the Provisional Association of American Medical Colleges will be held at the Palmer House, Chicago, on Saturday, June 3d, 1877, at 10 o'clock, A. M. All colleges represented at the meeting of the Association held June, 1876, are invited to send delegates to the ensuing meeting, and all chartered medical colleges in the United States recognized as "regular" by the colleges already represented in this Association, are also invited to send delegates from their Faculties to the said meeting.

J. B. BIDDLE, M. D., President.

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PHILADELPHIA, April 12, 1877.

The interval between the issue of the First and Second Parts of Dr. DUBRENE'S ATLAS OF SKIN DISEASES has been so much longer than was expected, that the Publishers deem it due to the subscribers to explain that the delay has been occasioned by unexpected difficulties attending the reproduction of the portraits.

The Publishers would assure the subscribers that the Parts will in future be issued as rapidly as consistent with the perfection of the work.

J. B. LIPPINCOTT & CO.

Books Reviewed.

A Practical Treatise on Diseases of the Eye. By ROBERT BRUDENELL CARTER, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital, etc. etc. With One Hundred and Twenty-four Illustrations. Edited with Additions and Test-Types by John Green, M. D. Philadelphia: Henry C. Lea, 1876, pp. 498.

This is a much handsomer volume than the English edition. It was written for the profession rather than for specialists, and the author says, "Contains but slight reference to modes of practice of which I am unable to speak from experience."

The opening chapter upon the "Anatomy and Physiology of the Eye," is followed by "Examination of the Eye," and the "Ophthalmoscope and its Application."

Two excellent chapters are given to "Principles of Ophthalmic Therapeutics," and "Principles of Ophthalmic Surgery." Special abnormal conditions are considered, beginning with diseases of the eyelids, Conjunctiva, cornea, iris, crystalline lens and its capsule are taken up in the order named. Glaucoma is the subject of a brief chapter, and is invariably treated, by the author, by iridectomy.

Diseases of the fundus oculi receive their full share of attention. It is a pleasure to chronicle a genuine, and heretofore unknown power over "the ills that flesh is heir to." We have one here in the management of symblepharon. "Until recently it was considered to be irremediable and many plans to prevent the union or to prevent the reunion when divided were tried and failed. It was reserved for Mr. T. Pudgin Teale who receives from the Yorkshire iron works large numbers of such cases, to discover the method of treating them and his discovery like most others which are good for anything, has no higher merit than its simplicity. He separated the adherent lid from the eye-ball by careful dissection, and then covered the raw surface of the eye-ball by conjunctiva, transplanted from above the cornea, and brought down, sometimes in two flaps, sometimes as an undivided band, adherent at both extremities.

The transplanted conjunctiva adhered readily in its new position, the raw surface of the lower lid had no longer a raw surface opposed to it, and the gap under the upper lid was soon filled up by a new formation, hardly distinguishable from the old." The remainder of the volume is devoted to affections of the ocular muscles, and the "Uses and Selection of Spectacles." It is eminently a book for the times, clear, practical, decided, stating what is the exact *truth*, without hesitation or reservation.

Dr. Green the editor finds many points of difference between himself and Dr. Carter whose practice does not entirely accord with that of other leading ophthalmologists, still in the main he is fully up to the times, and advocates intelligent, safe methods, rather than those that are brilliant, but hazardous and uncertain.

- *Chemical and Microscopical Analysis of the Urine in Health and Disease.* Designed for Physicians and Students by GEO. B. FOWLER, M. D., Examiner in Physiology, College of Physicians and Surgeons, New York, Visiting Surgeon to the New York Dispensary, etc. Second Edition, Revised and Enlarged, with Eighteen Illustrations. New York: G. P. Putnam's Sons, 182 Fifth Avenue, 1876, pp. 97, price \$1.00. Buffalo, Peter Paul & Bro.

The author says, "In this as in the first edition the object has been to present the most practical and important features of the subject."

His aim is realized, and the result is a very convenient monograph of this important feature of a physician's work. The proper lens power for microscopical examinations is given, also a list of the required apparatus and reagents for chemical analysis, and their cost.

Precautions to be observed with regard to reactions are enforced and comprehensive general directions are added to the detailed instructions which make up the body of the book.

Works of this sort which render diagnosis easier and more accurate cannot be too warmly commended.

Ziemssen's Cyclopædia of the Practice of Medicine. Vol. VI. Diseases of the Circulatory System, with Diseases of the Lips, Cavity of the Mouth, and Soft Palate, and Whooping Cough. By ALBERT H. BUCK, M. D., American Editor. New York: Wm. Wood & Co.

This volume contains a thousand pages, of which four hundred and seventy-eight are devoted to diseases of the heart and pericardium. Prof. Samuel S. Rosenstein, of the University of Leyden, contributes the portion which treats of the endocardial and valvular diseases of the heart, and it shows a carefulness and completeness which is very creditable. He recognizes three forms of endocardial inflammation: acute diphtheritic or ulcerative, sub-acute verrucose, and chronic contracting or sclerotic endocarditis. The last form is generally associated in advanced life with atheromatous disease of the arterial system and the process of its development he considers is not

to be distinguished from endarteritis, except in the contracting and indurating effects which follow endocardial inflammation: it is of insidious development and has the same etiology with atheroma, *e. g.*, old age, gout, alcoholism.

Diphtheritic or ulcerative endocarditis is of a typhoid or pyæmic character, and gives rise to the multiple capillary form of embolism. Sub-acute verrucose endocarditis is the more frequent form following articular rheumatism, and the emboli which result are of larger size and produce more noticeable local effects. Very frequently the development of valvular lesions is throughout of a chronic nature, and the primary causation not to be determined. The various secondary lesions which arise in different organs from embolism and congestion are described. Valvular lesions, their symptoms, diagnosis and prognosis are carefully and clearly presented.

The maximum intensity of an aortic regurgitant murmur is located at the third right sterno-costal articulation, instead at the fourth left sterno-costal articulation and diffused downwards to the apex, as given by Prof. Flint. In mitral regurgitation, the murmur is said to be propagated to the left auricle, and is heard in its auricular appendix which overlaps the pulmonic orifice; the transmission of the sound to the left of the apex laterally, and beneath the scapula behind, according to Flint, is not mentioned. In other respects, he is in accord with our own observers. The acuteness of American clinical observations and diagnosis of disease of the heart and lungs is a very just ground for national pride. We are pleased to notice Prof. Rosenstein advocates a quite discreet use of digitalis, of iron acetate, potassium acetate, valerian, hydrocyanic acid and other like remedies. Prof. Lebert, of Vevay, treats of Congenital diseases of the Heart. Prof. Schroetter, of Vienna, treats of Changes of Position of the heart and disease of its substance, and does not accept to the degree that Prof. Quincke, of Berne, who presents the Diseases of the Arteries, Veins, and Lymphatics, does, the idea ably supported by Seitz, and various authors, that severe physical exertion may give rise to endocardial or endarterial inflammation, which may be followed by fatal valvular disease. Dr. Bauer, of Munich, treats very fully of Pericarditis, as does also Dr. Steffen, of Stettin, upon Whooping Cough. Prof. Vogel of Dorpat, and author of a work on Diseases of Children, a translation of which was published in this country a few years ago, treats of Diseases of the Lips and Cavity of the Mouth, giving particular attention to Parotitis. Prof. Wagner, of Leipsic, author of the recent work on General Pathology, completes the volume with Diseases of the Soft Palate, among which the most noticeable and interesting, is perhaps the portion which treats of the various forms of croupous and diphtheritic pharyngitis. The completeness of the descriptions of disease in its various forms and with its complications and sequelæ, which is given in Ziemssen's volumes has been hitherto unattained, and make the series a most desirable acquisition.

W.

Theory and Practice of Medicine. By JOHN SYER BRISTOWE, M. D., Lonel, F. R. C. P. Physician to St. Thomas Hospital, Joint Lecturer at the School, and examiner in Medicine to the Royal College of Surgeons, formerly examiner in Medicine to the University of London, and lecturer on general pathology, and on physiology at St. Thomas Hospital. Edited with notes by JAMES H. HUTCHINSON, M. D., one of the attending physicians to the Pennsylvania Hospital, physician to the Children's Hospital, Philadelphia, etc. Philadelphia: Henry C. Lea, 1876.

This book is offered to medical students as a text book, and to the profession. From what we have been able to read of it, we think it adapted to the medical students in very high degree, while the experienced practitioner will take great pleasure and derive much benefit by careful perusal. The plain and practical descriptions of disease are so attractive to those having had some personal knowledge of origin, progress and termination of diseased processes, that too much cannot be said in favor of the work. It shows that the author speaks of conditions he has himself seen, studied and treated. His descriptions are "true to life." His pen pictures of diseased conditions, are beautiful, faithful, complete and instructive. They compose the attractions of the book in great degree. A wide range of subjects is considered, and the student or physician will here find full description of nearly all known disease, with mention of the various medicines used in its cure, without space to particularise, we can say in few words that the work is eminently adapted to the wants of both student and practitioner. As a book for the medical student, it is unsurpassed. As a standard work upon theory and practice of medicines, it is comprehensive, condensed, practical, and in all respects, "first rate."

Books and Pamphlets Received.

The Practitioner's Handbook of Treatment or the Principles of Therapeutics. By J. Milner Fothergill, M. D. Philadelphia: Henry C. Lea, 1877. Buffalo: T. H. Butler.

The Microscopist, a Manuel of Microscopy. By J. H. Wythe, A. M., M. D. Philadelphia: Lindsay & Blakiston, 1877. Buffalo: T. H. Butler.

Diseases of the Skin. By Louis A. Duhring, M. D. Philadelphia: J. B. Lippincott & Co., 1877. Buffalo: T. H. Butler.

Electro-Thermal Bath. By Justin Hayes, M. D. Chicago: Jansen McClurg & Co., 1877.

A Directory for the Dissection of the Human Body. By John Cleland, M. D., F. R. S. Philadelphia: Henry C. Lea, 1877. Buffalo: T. H. Butler.

Transactions of the American Medical Association, Prize Essay Supplement to Vol. 27, 1876, Excision of the Large Joints of the Extremities, By H. Culbertson, M. D.

Atlas of Skin Diseases. By Louis H. Duhring, M. D. Part II. Philadelphia: J. B. Lippincott & Co., 1877.

A Course of Practical Histology. By E. A. Schafer. Philadelphia: Henry C. Lea, 1877. Buffalo: T. H. Butler.

Classification of Skin Diseases. By L. Duncan Buckley, A. M., M. D.

Two Cases of Morphœ. By I. Duncan Buckley, A. M., M. D.

B U F F A L O

Medical and Surgical Journal.

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No. 12.

Original Communications.

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ART. I.—*Feasibility of Extirpating the Thyroid Gland in some Cases of Disease, with report of Case.* By J. F. MINER, M. D.

Having my attention recently called to the feasibility or possibility of removing the thyroid gland by operation when diseased, and seeing how surgical authors have most thoroughly discouraged the attempt and driven us from the field of contest when it seems in some cases cowardice to retire and abandon all effort, I propose to call attention to the question already perhaps settled in the minds of most surgeons, and to relate a case of some interest in connection with the subject.

All are familiar with the various plans which have been proposed for removal of goitrous tumors or relief of the distresses it occasions. Ligature of one or more of the arteries supplying the gland has been made with success in a few instances. Tapping encysted goiter and injection of the cyst has been followed by relief, perhaps by cure, but is not unattended by danger. Pressure with adhesive plaster has been reported as curative of the disease. Setons have been introduced, but this is said to be attended by

serious danger, admission of air to the veins having resulted where the seton has been employed. Injections of persulphate of iron in vascular and pulsating bronchocele has been tried, as has been said, with great peril and small benefit. Division of the tissues compressing the growth and the isthmus of the gland with the hope of relieving impending suffocation, has also been practiced, but mostly without satisfactory results, and to quote a paragraph from an interesting article in the *New York Medical Journal*, by S. B. St. John, M. D., who says, "The method of treating goiter by electrolysis certainly deserves a place. Its advocates, like electricians generally, admit no limit to its power." Althaus says: "All cases of bronchocele, however large, may be cured by electrolysis, if the treatment is continued for a sufficient length of time. The negative pole is introduced into the tumor, and the positive applied by a sponge-electrode in the neighborhood. The current should be passed five to fifteen minutes and two or three times a week. The action is ascribed partly to mechanical action of the nascent hydrogen in breaking up the tumor, and partly to the chemical action of the alkalies at the negative pole."

Extirpation with the knife is discouraged on account mainly of the liability of hemorrhage and other risks of the operation. Liston says, "The operation is attended by so absolute a certainty of fatal results as not to be warranted under any circumstances, far less for removal of deformity." Skey says, "The operation has been proposed in cases of great enlargement or of malignant disease, but is in my opinion inadmissible." Gross says, "If a surgeon should be so adventurous or foolhardy as to undertake the enterprise, I should not envy him his feelings while engaged in the performance of it. * * * * Every step he takes will be environed with difficulties, every stroke of his knife followed by a torrent of blood, and lucky will it be for him if his victim lives long enough to enable him to finish his horrid butchery. Whether, then, we view this operation in relation to the difficulties which must necessarily attend its execution or with reference to the severity of the subsequent inflammation, it is equally deserving of rebuke and condemnation, and no honest and sensible surgeon, it seems to me, would engage in it."

All this denunciation requires no reply other than relation of cases and statistics of results. Statistics collected by Dr. Welch show only twenty-five per cent. of deaths, one of these from ordinary causes such as may complicate any great operation. While, according to S. B. St. John, M. D., Gürlt's table gives twenty cases, eighteen cures, one death, a better record than many operations whose legitimacy is fully established. Dr. Green has successfully removed goitrous tumors by a novel and original method which consists in removing the tumor regardless of hemorrhage as quickly as possible, and tying the bleeding or torn arteries as they appear after removal.

After consulting our standard authors the question still remains what is the safest and best method to pursue. Without expecting to answer this question, I will briefly report a case of cystic degeneration of the gland which resulted in perfect cure after extirpation, but have no doubt great differences are to be observed in goitrous tumors, and that no one method of procedure will be found applicable in all cases or to the various forms of the disease.

Charles Hammel, aged fifteen years, of Wilcox, Pa., consulted me July 8th, 1876, for a tumor of the right portion of the thyroid gland as I inferred mainly from its movements in deglutition, location, size, period of growth and other appearances. Parents said, "Growth was first noticed seven years ago. After severe cold throat swelled very large, as large as a large bowl. When the swelling was reduced it left a lump about the size of a walnut, which continued for several years without change; for past two years increasing in size, interfering badly with his breathing, so that he cannot take any severe exercise, and at last when asleep, his efforts to breathe are painful to see." He came to Buffalo as a last resource, his friends willing to accept all risks offering any hope of relief, as he could not longer endure the distress of suffocation. At my suggestion he was admitted to the hospital of the Sisters of Charity and situation noticed for a few days, during which period he was examined by quite a large number of surgeons who visited the hospital and were attracted by his expression of anxiety and distress. Seeing the impending death if no relief could be afforded, I decided to attempt removal, and if insuperable diffi-

culties were met, to change the plan to meet the necessities as presented. The tumor was fully exposed upon its outer surface and its character noticed. By carefully separating it from adjacent parts we found it possible to nearly surround the growth with the fingers and handle of scalpel. A few not large arteries were ligated as they were divided or ruptured in the process of separating the tumor from its connections. The principal vascular supply was from its base, but no vessels of the size of the inferior thyroid were divided. Galvanic cautery was applied to the deep surface, which afforded profuse hemorrhage from numerous small vessels which could not be easily secured by ligature. The neck of the gland divided and right portion of gland removed attached to the tumor. Until this time I had no doubt of the goitrous character of the growth, but the comparative ease of removal, absence of dangerous hemorrhage or other difficulty, led me to inquire again if really the right position of the thyroid body had been thus removed. More careful examination showed cystic degeneration of the gland. The largest cyst containing about four ounces of viscid yellow fluid, resting upon remaining portion of gland and surrounded by several small cysts. The gland did not appear to be wholly involved in disease. The boy left the hospital in about three weeks, fully recovered and relieved of all trouble.

The whole subject of Goiter, Bronchocele, Struma, Derbyshire neck, etc., as included under the general head of benign enlargements of the thyroid gland are most thoroughly before the profession and I have no expectation of adding anything important to our knowledge of this form of disease. Goiter should be distinguished from Bronchocele, struma, cystic tumors, etc. All are aware that Goiter has been described under an extensive variety of forms which Virchow has shown may all be reduced to, and regarded as, hypertrophy or hyperplasia of the normal gland elements—that the differences arise from the different degrees of implication of the different normal elements and from secondary processes which have the character of retrograde metamorphosis. The changes are ordinarily unimportant, but when the gland is the seat of pathological conditions resulting in enlargement sufficient to endanger

life by pressure upon other organs, their clinical importance is sufficiently obvious.

I may be allowed in passing to remark upon the vascular supply of the organ which is said to be far beyond the requirements of its tissues and received from four large arteries. The two superior thyroid from the external carotid and the two inferior thyroid from the thyroid axis assisted sometimes by a fifth, the median thyroid from the innominate or arch of aorta. Mayer estimates that the thyroid receives as much blood as the forearm, others that the arteries of the thyroid are eight times as large as those of the brain considered relatively to the weight of the respective organs. At all events, the organ is so vascular that incisions made into it are often attended by dangerous and even fatal hemorrhage. The vascular supply is changed by disease. It is augmented, and I mistrust it may be *lessened*,—vessels diminished in size and changed in distribution, so that a diseased gland may in some cases be more easily and safely extirpated than a healthy one.

I only desire in this paper to call attention to what I regard established, that some geitrous tumors may be extirpated with the knife, if other means fail, with *reasonable hope of success*.

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ART. II.—*On Albumen in the Treatment of Pulmonary Consumption.* By E. L. SHURLY, M. D., Detroit, Mich.

CONCLUDED.

1875, FEB. 6TH. CASE III.

Mrs. A. W. P.—æ. 25. Married. Tall and spare. Good hygienic surroundings. Has lost her father and three aunts on father's side with Phthisis Pulmonalis. Was tolerably well previous to marriage about a year ago, excepting a predisposition to "taking cold." Has had two attacks of slight hemoptysis, nine and seven months respectively; and since then, cough with more or less expectoration. Has some indigestion; slight nocturnal fever, preceded often about 5. P. M., by a chill, or chilly sensations; dysme-

norrhoea which is increasing in severity; and dyspnoea upon exercising. Laryngoscopic examination shows slight reddening of the vocal cords, and granular pharynx.

Physical signs: Expansion of the right side of thorax only moderate. Percussion of right upper front shows resonance, but higher pitch. Respiratory percussion shows disparity between inspiratory and expiratory resonance on right side. Auscultation shows in right upper front a broncho-vesicular murmur and over back of right side from 3d rib down bronchial respiration with duller percussion sound. Auscultation shows also a prolonged expiration over this side especially in scapular and supra-regions. No abnormal transmission of heart sounds.

Treatment **R.** Glycerole of albumen $\mathfrak{z}$ XII. Syr. of hypophosphites co. $\mathfrak{z}$ iij. m. and take tablespoonful three times daily, also a warm spray of a solution of carbolic acid (gr. iij. ad. $\mathfrak{z}$.) to be inhaled three times daily, and a cathartic pill containing one half grain of Ext. belladon. to be taken just previous to the first day of menstruation, in order to mitigate the pain thereof.

Feb. 19th. It is noted that she now suffers from pain in the left side and hoarseness in the morning, but that the physical signs remain about as they were, and that she is also suffering from an acute nasal catarrh. The albumen was continued in the dry form, mixed with hypophosphite of soda.

Feb. 29th. It is noted that the cough and nocturnal fever have greatly abated, as also the pain during menstruation, and that she is improving. From this on she has been slowly improving, gaining in flesh and strength, while the physical signs have shown a slight clearing of the right lung, as evidenced by the more vesicular character of the respiration. She is now (Dec. 1876,) doing well, being able to attend to all of her household and other duties.

FEB. 14TH, 1875. CASE IV.

Mary Kremer, *æt.* 17. Unmarried. Occupied by doing housework, pale, medium height and form stooped. Good hygienic surroundings and food. Good habits. Father a subject of bronchial asthma, but other members of family in good health. Was never very robust. Has had a cough and some expectoration more or

egg for two years, with tendency latterly to night sweats. Voice nasal. Respiration frequent. Fever at night. Little appetite. Bowels constipated. Pain more or less in chest and epigastrium. Tonsils enlarged. Pharynx follicular and dry.

Physical signs: Auscultation shows mucous, and sibilant rales, and crackling over left infraclavicular and mammary regions, with bronchial respiration and prolonged expiration. On opposite side, sibilant rale upon forced inspiration, and rude respiration all over.

Treatment: *R.* Teaspoonful of dry albumen with five grains of Sodium hypophosphite four times daily; as many eggs to be consumed as possible, and one glass of ale at meals.

Dec. 1876. This treatment has been pursued closely ever since and she has slowly improved, all the symptoms of disease having greatly diminished. An examination of the lungs a few days ago shows Bronchial respiration and sibilant rales over upper left side of thorax, with considerable contraction. She still coughs and expectorates some, however, especially in the morning.

1875, JULY 15TH. CASE V.

Mrs. M. C. W.—*æ*t. 20. Mother of one child. child; medium stature; pale and spare; lives on the bank of the river; surrounded by every comfort necessary to good living; although the house is very damp and stands near a distillery. Father healthy as also brothers and sister, but mother now lying ill of Phthisis Pulmonalis (advanced). Was in tolerable good health until a little over a year ago, when she contracted ague which continued to trouble her more or less until a month or so ago, but, apparently left her with a hacking cough, chronic nasal catarrh, and debility. She now has "spells of fever," and night sweats; little appetite; constipation; foetid breath; indigestion; cold feet; palpitation of heart; and nervousness. The cough is very troublesome during the night and the expectoration very little. Menstruation irregular but more painful. Is emaciating, and soon tires upon moderate exertion.

Physical signs: Nasal passages and Pharynx dry and covered more or less with crusts. Percussion sound little duller over left Infraclavicular and mammary regions. Respiratory percussion

shows no disparity of sound between inspiration and expiration. Auscultation shows very feeble respiratory murmur and expiration equal in length to inspiration over these regions, with higher pitch, as compared with other side.

Treatment: Sol. of potass, pr. mang. (gr. ss. ad. ʒ.) to be used with nasal douch every morning: five drops of Fowler's Sol. with three grains of quinine three times daily; three fresh eggs daily with wine, besides a diet of meat, milk, etc., as much as can be taken and digested and removal as soon as possible to another location.

Aug. 18th. It is noted that she has had since the first of the month more dyspnea and considerable pain in left side of thorax with increase of the hacking cough and that the physical signs remain about the same. The nasal catarrh worse. She has been unable to take more than two eggs daily from inability of the stomach to digest them. R, Counter irritation by means of repeated small blisters over side and front of thorax and to take one teaspoonful of Powd. albumen four times daily with two eggs in wine if possible. Continuing the use of douche.

Aug. 26th. She still has pain in chest, but less constant and severe, also fever during latter part of the day, and absolute loss of appetite. Stomach more quiet. Is fully under the effect of arsenic. She has not removed, and states that "mould" will form on boots and shoes in a short time, when they are placed in any of the rooms having no fire.

Oct. 7th. Was better generally until a couple of days ago; coughs and expectorates considerable; fever and sweating every afternoon. Physical examination of chest shows moist crackling and subcrepitant rale over both upper lungs, but more in left side. Voice quite weak, and bronchophany to some extent in left infra-clavicular region. Treatment: To take five drs. daily of powd. albumen and two eggs daily if possible; three ozs. wine daily and two doses of quinine, three grs. each, for a few days.

From this on she slowly improved, and after removal to a new house in better locality improved more rapidly. During this time up to Feb. 1876, she has taken albumen either dry or in the natural condition in eggs. Dec. 9th, 1875, she had an attack of

acute Bronchitis lasting about two weeks, but has continued to improve since, until now, Dec. 1876' she looks well; is fleshy; and quite vigorous—although the left lung is somewhat consolidated yet.

OCT. 21ST, 1875. CASE VI.

D. P. French Canadian, æt. 29. Shoemaker. Married. Tall and spare. Good family history. Works in a crowded, ill-ventilated shop, and lives in a crowded family. Has been unhealthy and weak for past three years, having had more or less dyspepsia and cough, the latter of which has been gradually growing worse. Had a severe hæmoptysis this afternoon following a severe paroxysm of cough.

Physical signs: Inspection shows sinking of supraclavicular region of right side; chest walls not very mobile, and respiratory acts frequent. Percussion shows upper right front to be a little duller; no difference shown by respiratory percussion. Auscultation shows feeble vesicular murmur in upper part of both lungs, but more bronchial in character on right side; also large mucous rales in both upper mammary regions and abnormal transmission of heart's sounds.

Treatment: R. Glycerole of albumen, tablespoonful three times daily, and Fl. ext. Ergotæ in thirty drop doses until hemorrhage ceases. To get out into the open air more, and sleep in an apartment constantly supplied with fresh air.

Dec. 1st, 1876. There was no more hemorrhage. The albumen treatment was continued more or less up to date, and he is now working at his trade again but not so many hours daily. The upper right lung shows consolidation, he is not much fleshier but feels well and stronger than for four years past. His diet continues to be principally eggs and meat.

MAY 15TH, 1875. CASE VII.

J. G.—æt. 19. Printer; spare; tall; of Irish parents; comfortable home; temperate habits; very industrious. Good family history as far as known. Usually in tolerable health although never very strong. Was taken sick day before yesterday with chills and fever, and hacking cough. The chills, fever, cough, etc.

continued more or less for about ten days, during which time the cough continued and mucous and subcrepitant rales made their appearance, while the respiratory murmur grew more and more feeble, and the respiratory acts more frequent. He recovered very slowly from this attack, but continued coughing and expectorating, with more or less fever and sweating at night, and on June 25th, the Physical signs: showed a duller percussion note in Infraclavicular and Infrascapular region of right side, with Broncho vesicular respiration, and mucous and sibilant rales over both infraclavicular and mammary regions.

Treatment: consisted at first of quinine and laxatives, and subsequently of Emul. ol. marrh. et. album. About the middle of July he began doing light work again.

May 21st, 1876. It is noted that he gradually improved so that he began to feel quite well again until about two weeks ago, while returning from a visit to Wisconsin—crossing the lake—he contracted a severe cold and soon began coughing severely and expectorating considerable frothy blood, which has continued more or less up to this date (May 21st, 1876). It is noted that the physical signs on this occasion were—very feeble murmur, even upon forced inspiration, and abnormal transmission of heart's sounds, throughout the right upper front of thorax and rude respiration throughout lower lobe of right lung, with some large mucus rales in interscapular region. Percussion duller over upper left side. Treatment consisted of tablespoonful of Glycerole of albumen with five grs. of sod. hypophosphite four times daily. Fl. ext. ergotæ, and good ale. The hemorrhage soon ceased and he continued to improve, but never gaining much in weight, until now (Dec. 1876,) he feels quite well and is able to do "a light day's work." The upper right lung, however, remains changed from the normal condition, and he still coughs a very little. He has been taking the albumen more or less up to last month (Nov. 1876), and was recommended to continue its use more or less.

1875, Nov 2D. CASE VIII.

Wm. N.—æt. 40. Policeman, formerly a miner. Married. Tall and very thin. American. Dwelling not very clean or airy.

Temperate habits, though in the habit of drinking some whiskey, and by virtue of occupation is up nights more or less, when he often contracts "a cold." Family history not ascertained, was in good health and fleshy until about a year ago, when he contracted "a cold" which, as he says, has never left him. Has chills: fever, and sweating; is emaciating and gradually growing weaker; appetite poor; bowels constipated, and considerable cough and expectoration.

Physical signs: Percussion sound duller over infraclavicular and mammary region of right side and more resonant than in health over left side generally; mucus (large and small) rales and sibilant rales over both sides; bronchial respiration and bronchophony over upper right lung, and feeble murmur elsewhere.

Treatment: Albumen, muriate of ammon. and quinine.

This patient has been under treatment ever since, principally by albumen and sodium hypophosphite; and although he has from time to time suffered from acute attacks of bronchitis, he has steadily gained a little, and now is able to attend to his duties as policeman, with but little intermission. The right lung has contracted considerably as shown by the form of the thorax and the physical signs show bronchial respiration in upper right lung with some vesicular (probably) emphysema in left lung. He now takes fresh eggs and whiskey daily in addition to ordinary meals.

1875, DEC. 2D. CASE IX.

Mrs. A. P.—Norwegian; mother of five children; æt. 32. Tall, "large framed" woman but spare. Resides on the bank of river, but the ground on which house stands is well drained. Has not had any ague for several years. In comfortable circumstances though of frugal habits. Family history, as far as known, good. Has been out of health for past five months, during past two months having cough with little expectoration, and during last two months having nocturnal fever and sweating, but not preceded by chills at all. Has loss of appetite; constipation usually; sense of great debility, considerable cough and sometimes bloody expectoration and is emaciating quite rapidly.

Physical signs: Percussion shows dullness over both scapular

and infrascapular regions, also over infraclavicular and upper mammary regions of right side. Auscultation shows broncho-vesicular respiration in both upper fronts, and behind in both suprascapular and scapular regions vesicular quality nearly absent. In infrascapular regions the respiration shows nearly normal vesicular quality. Sibilant rale and bronchial voice in right upper front.

Treatment: Four tablespoonfuls daily of gly. albumen; meat diet, eggs and fresh air, together with the donning of flannel underclothing. This treatment was continued "right along" and now, Dec. 1876, she is stronger and weighs about fifteen pounds more than for three years past. She still coughs a little, especially in the morning. Physical signs show no rales, but still a rude respiration over upper right front, and a more vesicular quality over scapular and infrascapular regions of right side.

As the abstracts of cases already given occupy considerable space and as enough detail has been given to show the plan of observation and diagnostic points entertained, I shall therefore in the following cases only give the more salient points, and thus reduce their narration to the least possible amount of matter.

1875, DEC. 15TH. CASE X.

R. F.—æt. 19; tall and thin; clerk; dissipated periodically; good hygienic surroundings; lost two brothers of Phthisis Pulmonalis. Has had one attack of hemoptysis and "dry cough" for a year which is growing worse, also nocturnal fever.

Physical signs: Percussion note little duller in upper left thorax. Auscultation. Dry crackling, sibilant and subcrepitant rale over both upper lungs—more marked over left. Bronchial respiration and some mucus rales in upper left side; inspiration and expiration same length.

Comments. Was under treatment nine months principally by albumen and gradually improved until now he is at business and feels tolerably well. Weight not increased much.

1876, JULY 3D. CASE XI.

Mrs. L.—æt. 39; mother; suckling babe one year old at night; very slender and sallow. Lives in small apartments and is poor,

Had a cough for a long time when young. Brothers and sisters subject to cough. Was quite well until three months ago, when slight hemoptysis came on followed by a hacking cough which has continued since. Expectorates some in morning. Has slight nocturnal fever. Is emaciating.

Physical signs: Percussion about same over both sides. Auscultation. Very feeble vesicular murmur both sides, especially in right infrascapular and infra-axillary regions. Expiration prolonged and jerky. Abnormal transmission of heart's sounds.

Comments: Is still under treatment by albumen. "Is holding her own."

1876, JAN. 22D. CASE XII.

M. D. W.—æ. 26; tall, spare; gentleman brought up in affluence; dissipated; whole family unsound physically, being especially subjects of nervous disorders. Was in tolerable health until about four months ago when he "took cold." Is now under great mental pressure. Is very nervous, sleeps badly and sweats. Has dry cough almost constantly. Emaciating; little appetite; respiration and pulse very frequent.

Physical signs: Percussion note duller over right infraclavicular region. Auscultation. Broncho vesicular respiration over upper left front. Bronchial respiration over upper right front; prolonged expiration; crust crackling, sibilant, and small gurgling in upper right infraclavicular region.

Treatment: Teaspoonful of albumen with two grs. calc. hypophosphite four times daily, and three eggs daily. To go south as soon as possible.

Comments: He continued this treatment during his sojourn in the South and gradually improved so that this winter he is in Wisconsin, and, I hear, very much improved, though not well. He is still pursuing the same treatment.

1876, FEB. 9TH. CASE XIII.

Miss J. M.—æ. 20; comfortable surroundings; medium stature; quite thin. Very sickly mother but healthy father. Brothers and sisters all living. Has been subject to a cold on and off for more than a year. Has had constant hacking cough for about three

months, and is emaciating. More or less pain in chest. Dysmenorrhœa and quantity scanty. Easily sweats, no fever though.

Physical signs: Respiratory murmur very weak in both lungs, prolonged expiration in upper part of left, with dry crackling. No difference shown on percussion.

Treatment: Emil. albumen et ol. morrh; out door exercise, and belladonna at menstrual period.

Comments: She feels quite well now and has no dysmenorrhœa. Has gained a little in flesh. Examination of chest on 3d of Nov. 1876, shows no adventitious sounds, and a clearer murmur, although it is yet weak. She has been taking on an average three eggs daily for last three months.

1876, MAY 29TH. CASE XIV.

Mrs. J.—æt. 32. Tall and spare. Does little work of any kind. Comfortably situated in life. Family history good, though brothers and sisters are not very well. Edges of lids reddened. Never very strong. Had a slight hemoptysis or two, a couple of weeks ago, which was preceded for about two months by hacking cough. Is very nervous. Menstruation scanty, insomnia; indigestion; emaciating; and growing weak; constipated and cough almost constant. Pain in left side.

Physical signs: Broncho vesicular murmur over both upper parts of lungs, higher pitch in left side, also bronchial respiration in patches over upper part of both lungs. No difference of percussion note. At a subsequent examination a sibilant rale was discovered in left infraclavicular and suprascapular region.

Treatment: More fresh air, albumen, and quinine.

Comments: She has been under the albumen treatment ever since with the addition of inhaling a warm spray impregnated with either, Fl. ex. of courium. or carbolic acid. She still coughs, especially in damp weather, but up to this time has gained ten pounds in weight and feels much stronger.

I have some other cases under treatment—principally by albumen—which, as they came under my care more recently will be omitted from this report.

This plan of treatment was partially tested in a case of acute

Tuberculosis, but with no positive results, and in three cases of advanced Phthisis, with probably no other effect than to diminish somewhat the nocturnal fever and sweating. But in a case of marasmus, so called, or "tuberculosis of the mesenteric and bronchial glands" of considerable duration, in which cod liver oil had been extensively used, the effect of albumen in quite large doses was very satisfactory. Also, in a case of severe gangrene of the lungs, it undoubtedly had the effect of prolonging life.

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ART. III.—*Laceration of Duodenum.* By E. V. STODDARD, M.D.
At 1 P. M. Oct. 9, I. C. E., æt 33, received a blow upon the Epigastrium from a piece of board about three feet long and six inches wide, thrown back by a circular saw against which it had been placed for the purpose of division. The blow fell in the median line about two inches above the umbilicus. Examination, external, revealed a hardly noticeable abrasion. Nothing else. Patient pale and exsanguine; skin cool; pulse fifty-two and very slow; pain at seat of injury intense; abdominal muscles rigidly contracted; stimulants, and everything taken into the stomach, instantly rejected.

Chloroform, with hot fomentations, and one-sixth grain morphia Sulph., Hypodermically relieved the pain after a short time.

At 6 P. M., easy, p. 84; at 10 P. M., easy, p. 94; at 12 P. M., p. 96; urine by catheter, $\frac{3}{4}$ NI.

Oct. 10th, 7 A. M.; has been quiet to this time; restless, p. 110; weak, respiration short; constant desire to urinate; no urine by catheter; failed rapidly and died at 9.30 A. M.,—(twenty-one hours after receipt of injury.)

Post mortem, nine hours after death; rigor mortis well marked; slight emphysema of subcutaneous cellular tissue of abdomen, chest, neck and face, principally of left side. External marks of injury: a very slight abrasion about two inches above the umbilicus, in the median line; abdomen slightly distended by gas; on opening thorax and abdomen, traces of injury very apparent. The muscles of abdominal wall ecchymotic internally at seat of injury. Small clots of blood lying upon the intestines, below the

stomach, and the abdominal cavity contained three pints of bloody fluid and clots. The intestines and omentum highly congested. The stomach appeared normal with the exception of slight congestion of its lower portion. At its pyloric extremity was the seat of lesion; at this point a laceration had occurred, separating the duodenum transversely from the pylorus. The upper margin of the liver showed a slight laceration and contusion. Lungs healthy, except considerable luephysema extending through the mediantrum. The cause of death was evident in the *complete laceration and separation of the duodenum* at the pyloric orifice of the stomach.

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MISCELLANEOUS.

The State Medical Society.

The Medical Society of the State of New York, convened in the Assembly Chamber Tuesday morning at eleven o'clock, and was called to order by Dr. E. R. Squibb, of Brooklyn, President of the Society. There was an attendance of over one hundred members. The session was opened with prayer by the Right Rev. Bishop Doane, of Albany.

The President then proceeded to read his opening address, in which he congratulated the members of the Society on its prosperity, and suggested for its still further advancement that the presiding officers be selected with the more single purpose of getting a good active servant of the Society who would carry out its work with impersonal energy; that the presiding officer should carry out and be responsible for the work of the Society at the meeting over which he presides; that the address which usually occupies the Wednesday evening session be discontinued, or at least the penalty of \$25 for failure to deliver it, be abolished; that the Secretary's annual salary be increased to \$500, or that the editorship of the Transactions be separated from the duties of the Secretary, and given to an editor; that each volume of the Transactions hereafter should have a copious index; that a list of delegates, by counties, with the time of election and expiration of service should precede the list of permanent members, and be kept up with official accuracy, so that the true character and construction of this body as a society of delegates should be more prom-

inent, and that the Treasurer should receive compensation for the time and labor required of him by the Society.

The President further says that he has, during the year, signed a diploma for Dr. Carl Schade, of Buffalo, and also signed a petition to the Legislature for the passage of an act to provide for the sanitary inspection and supervision of common schools and school buildings in New York City. Dr. Frank H. Hamilton, of New York, had been appointed to the vacancy in the delegation to the American Medical Convention.

The President announced the following committees :

Hygiene.—Drs. E. V. Stoddard, of Rochester; C. R. Agnew, of New York; John T. Van Alstyne, of Columbia; James C. Hutchinson, of Rensselaer; Taber B. Reynolds, of Saratoga; E. M. Lyon, of Clinton; Edwin Hutchinson, of Oneida; J. R. Stockwell, of Oswego; T. H. Squire, of Chemung; J. G. Orton, of Broome; C. G. Pomeroy, of Wayne; Harvey Jewett, of Ontario.

Credentials.—Drs. Wm. Manlius Smith, of Onondaga; G. H. Blake, of Livingston; A. N. Saunders of Madison.

Reception and Arrangement.—Drs. E. R. Hun, Wm. H. Bailey, of Albany; A. W. Tucker, of Washington.

Business.—Drs. George Burr, of Broome; S. F. McFarland, of Chenango, R. H. Ward, of Rensselaer.

Ethics.—Drs. Wm. C. Wey, of Chemung, Austin Flint, of New York; Frederick Hyde, of Cortland.

Nominations.—Drs. A. Hutchinson, of Kings; P. R. H. Sawyer, of Westchester; C. E. Whitbeck, of Albany; J. M. Rose, of Herkimer; L. A. Van Wagner, of Madison; J. H. Crittenden, of Broome; C. G. Pomfret, of Wayne; T. F. Rochester, of Erie.

A vote of thanks was then tendered the President for his address, and a recess for half an hour was taken for the purpose of organizing committees, receiving credentials, and for registration of names of permanent members.

On reconvening, the Committee on Credentials reported the members present, and Dr. Bailey of the reception committee introduced the following delegates from other State Societies : Dr. Collins, of the Massachusetts State Medical Society; Dr. Gillett, of Pennsylvania State Society, and Dr. D. A. Curry, of the New Jersey Society. Dr. Curry, when introduced, made a few witty remarks which were received with applause.

A motion that the nominating committee report a committee on President's address was adopted.

The treasurer reported the balance on hand at the last report was \$287.71; received during the year, \$1,384.31; disbursed during the year, \$1,684.19. In the general fund the receipts were \$1,922.76, and the disbursements \$2,132.31, leaving a balance due treasurer of \$209.55. The report was referred to an auditing committee, with Dr. Elliott as chairman.

The Secretary, Dr. E. R. Hun, reported the number of Transactions on hand, and the report was accepted.

Dr. Bailey, from the Committee on Publication, reported that 1,500 volumes of the Transactions had been printed during the past year.

The reports of delegates to other societies were then received, and after some discussion on unimportant matters a recess was taken until three o'clock.

AFTERNOON SESSION.

The Society was called to order by the President at 3 o'clock.

Dr. Rochester, of the nominating committee, reported as the committee on the President's inaugural address: Dr. Ellsworth Eliot, Dr. A. Van Derveer and Dr. H. Jewett, of Canandaigua.

Dr. R. W. Pease, of Syracuse read a paper on the Recent Improved Methods of Diagnosis and treatment in Urethral Surgery, with tabulated statement of results in forty-five cases. Discussed by Drs. Case of Oneonta, Wheeler of Onondaga, and others.

Dr. J. Kneeland, of South Onondaga, read a paper entitled "Two Cases of Sudden Death—Coroner's Inquests." Accepted, and referred to the publishing committee. The paper was discussed by Drs. Rochester and Graves.

The chairman of the business committee read by title a paper entitled "An Obituary Notice of James Thorn, M. D.," by R. H. Ward, M. D., of Troy. Referred to publishing committee.

Dr. A. Van Derveer, of Albany, read a paper entitled "Operation for Closure of Cleft of Hard Palate, with report of cases." The paper was discussed by Dr. Goodwilly, of New York, who presented a wax cast of a subject on which he had operated and gave an illustration of the manner in which the operation was performed, exhibiting the instruments used. Dr. Hutchinson, of Utica, also participated in the discussion. The paper was referred to the publishing committee.

Dr. William C. Wey, of Elmira, read a paper entitled "Sanitary Inspection in Schools." Referred to publication committee.

The business committee reported a paper entitled "Hydrophobia; Rabies Canina," by John W. Greene, M. D., of New York. The president read a letter from Dr. Greene, stating that he was unable to prepare the paper on account of professional engagements.

Dr. Wey moved that Dr. Greene be requested to complete his paper within thirty days, and that it be referred to the committee on publication with power. Carried.

Dr. Greene has paid considerable attention to this subject and is thoroughly posted thereon. He is recognized by the profession as an authority on hydrophobia, and his paper will doubtless be a very valuable one.

Dr. Kneeland made some remarks on the subject, and was followed by Mrs. Dr. Mary Putnam Jacobi, and Dr. E. R. Squibb, of Brooklyn.

Dr. H. T. Hanks, of New York, read a paper entitled "The Forcible and Rapid Dilatation of the Cervical Canal, for the Cure of Antiflexion." Referred to the committee on publication.

Dr. John Ball, of Brooklyn, read a paper on "Forcible and Rapid Dilatation," etc.

Recess until eight o'clock.

EVENING SESSION.

The Society reconvened at eight o'clock.

A communication from Dr. McIlvaine, who was appointed delegate from the Ohio State Medical Society, was read by the president. Dr. McIlvaine stated that he was not able to attend this meeting, and expressed his regrets, etc. The subject was ordered entered on the minutes.

Dr. Thomas R. Pooley of New York, read a paper entitled, "Puerperal Metastatic Iridio-Chloroiditis," which was referred to the publication committee.

The business committee then called for the paper of Dr. A. W. Tupper, entitled, "Ten Years Inside the Medical Society of the State of New York." Dr. Tupper stated that perhaps some of the statements contained in his paper might not suit some of the members and requested that the paper should be submitted to the business committee to see if it contained anything objectionable. The paper was so referred.

The business committee called for the paper of A. McLean Hamilton, M. D., entitled, "Climatic Influence in the Production of Nervous Disease." The president read a telegram from Dr. Hamilton, stating that he could not be present.

Dr. S. L. Parmalee, of Watertown read a paper entitled, "Punctured Wound of Lung, Diaphragm and Liver, with recovery," which gave rise to some discussion as to whether the liver was punctured or not. The paper was referred to the publication committee.

Dr. Joshua B. Graves, of Corning read a paper entitled, "Report of a Case of Fracture of the Base of the Skull, with recovery." Referred to publication committee. The paper was discussed by Dr. Hyde, of Cortland; Dr. Becket, of Albany; Dr. Chapman, Dr. Sawyer, of Bedford; Dr. Sherman, of St. Lawrence; Dr. Kneeland, of South Onondaga, and Dr. Kendall. The Society then adjourned to 9:30 A. M. Wednesday.

MORNING SESSION.

The Society reconvened Wednesday morning at half-past nine o'clock, and was called to order by President Squibb.

Prayer was offered by Rev. Dr. Upson, of the Second Presbyterian church.

The minutes of the previous sessions were read and approved.

Dr. William H. Bailey, from the committee on reception and entertainment, reported a large number of visitors, who were admitted to seats in the Society.

Reports were then received from the committees on credentials, business and ethics, and after discussion were adopted.

The question of changing the date of holding the annual meeting then came up and gave rise to an extended discussion.

A motion to hold the annual meeting on the third Tuesday in January was finally adopted.

This question disposed of, the reading of papers was next in order, when Dr. Austin Flint of New York, read one on "Pneumonic Fever, grounds for considering acute pneumonia an essential fever, and not purely a local inflammation." Dr. Mary Putnam Jacobi, presented "Two cases of convulsive disorder, without convulsions." All of the papers were discussed at some length.

The subject of establishing a committee to determine the qualifications of students in medical colleges, when about to enter the profession, the services to be tendered to such colleges as may desire them, did not come up, owing to the absence of Dr. E. M. Moore, of Rochester, chairman of the special committee, which was to report on the matter.

A motion to postpone the subject for one year was made and carried.

A recess was then taken until three o'clock.

AFTERNOON SESSION.

The Society reconvened at three o'clock P. M.

Dr. Edward H. Parker, of Poughkeepsie, read a paper entitled "Heredity as a Factor in Pauperism and Crime." The paper was a practical statement of the "Tramp Nuisance" giving statistics, etc. Referred to the publication committee. The paper was discussed by Dr. Wey, of Elmira, Dr. Diamond and Dr. Kneeland.

The report of the committee on the president's address was taken from the table and amended and recommended to the committee. The report of the committee, with the exception of the portion relative to the appointment of the nominating committee was adopted.

Dr. Ellsworth Elliott, chairman of the committee on the treasurer's report, reported the report as correct, and made several recommendations relative to the collection of dues. The report was accepted and adopted.

Dr. J. W. S. Gouley, of New York, read a paper entitled "Stone in the Bladder." Referred to publication committee.

The paper was discussed by Dr. Hamilton, of New York, and Dr. Van Derveer of Albany.

Dr. George Bayles of New York, read a paper entitled "Nitrite of Amyl in Pertussis." Referred to publication committee.

D. C. H. Giberson, of Brooklyn, read a paper entitled "The Cold Bath in Scarlatina"—Clinical Notes. Referred to publication committee.

The paper was discussed by Mrs. Dr. Jacobi and Dr. Kneeland. Dr. Alexander Hutchins, of Brooklyn, read a paper on "Jaborandi," which was referred to the publication committee.

A recess was then taken until eight o'clock.

EVENING SESSION.

The Society reconvened at eight o'clock.

Dr. A. N. Bell, of Brooklyn, chairman of the committee on Hygiene, read an abstract of the report of the committee, and it was referred to the committee on publication.

Dr. Norman S. Snow, of Albany, read a paper entitled "Psuedo-Membranous Laryngitis:—Tracheotomy:—Relapse and Recovery." Referred to the committee on publication. The paper was discussed by Dr. Goodwilly, of New York.

President Squibb read a paper entitled "Tar Fumigations in Gangrenous Sores," written by Lewis Post, M. D., of Lodi, an honorary member of the Society. Referred to the publication committee. The paper was accompanied by a letter from Dr. Post, giving the history of a disease with which he is afflicted, supposed to have arisen from the sores of the case reported. The letter was also referred.

Dr. C. G. Pomeroy, of Newark, N. Y., read a paper on "Hydrochlorate of Ammonia—Ammonia Murias," which was referred to the publication committee. The paper was discussed by Dr. Manlius Smith.

On motion of Dr. Kendall the rules were suspended, and the report of the committee on president's address was taken from the table, but not considered.

Dr. Henry G. Piffard, of New York, read a paper entitled "Certain points relating to the Nature and Treatment of Lupus." Referred to publication committee.

The report of the committee above alluded to was then presented and was freely discussed and adopted.

Dr. Ira F. Hart's paper on "Hereditary Transmission of Disease" was read by title and referred to the committee on publication.

Adjourned to 9:30 A. M., Thursday.

—————:O:—————

Relation of Air to the House we live in.

At present the demands for ventilation in France sound very different from what they were about twenty years ago. They are now per hour and person :

Hospitals for ordinary cases	2,120—2,470 cubic feet.	
“ wounded	3,53	“
“ epidemics	5,300	“
Prisons	1,766	“
Workshops, ordinary	2,120	“
“ unhealthy	3,530	“
Barracks, day	1,060	“
“ night	1,410—1765	“
Theatres	“	“
Large rooms for long meetings	2,120	“
“ “ shorter	1,060	“
Schools for children	420— 530	“
“ adults	880—1,060	“

Such are the changes of times.

Now the many crevices, holes, and pores in our dwelling will no longer be considered by you as unlimited means of change of the air, since you know how large the change has to be ; you will rather feel anxious whence to procure such enormous quantities when you sit quietly within your four walls where you do not feel the least draught, where no curtain moves, and a feather lies quietly on the floor. This sensation of calm we owe to the insensibility of our nerves—and yet the air moves.

In order to give you some idea of the influences of differences of temperature of more or less well-shutting doors and windows, of a fire in a stove opening into the room, and of the partial opening of a window, I will give you shortly the results I obtained with the aid of the carbonic-acid measurement. The room had brick walls, and its size was 2,650 cubic feet.

With a difference of temperature of 34° Fahr (66° in- and 32° outside), the contents of the room changed once in one hour, equal to 2,650 cubic feet.

With the same difference, but a good fire in the stove, whose communication with the chimney was made as free as possible, the change of the air rose to 3,320 cubic feet, or about twenty-five per cent. When all openings, crevices in the windows and doors, were thoroughly pasted up, there was still a charge of 1,060 cubic feet per hour, or a fall of twenty-eight per cent. With a difference of temperature of 71° in- and 64° outside, the change amounted to 780 cubic feet only per hour. When opening a window of eight square feet, the change rose to 1,060 cubic feet per hour. these quantities are instructive. They show that a difference of temperature of 34° with carefully-cut openings and crevices is of greater influence than large communications with the outer air at a small difference of temperature.

The roaring fire and the draught of the stove produced only an increase of 700 cubic feet—one-third only of the necessary ventilation per head. I have examined a number of stoves opening in a room for a quantity of air which they abstract while the

fire burns. The anemometer showed that it was never more than 3,105 cubic feet. Large wards in hospitals, schools, etc., heated by one open fireplace or stove, are sometimes wrongly believed to be well ventilated, because one perceives the air rushing into the same. But the main point is to know the quantity of required air and the quantity of outgoing air.

The free wall of a room of mine has been examined for its ventilating power. The room contained 2,650 cubic feet, and at 9.5° Fahr. difference of temperature between outside and inside, the spontaneous ventilation through each square yard amounted to about seven cubic feet, or forty-three gallons per hour.—*Dr. Max Von Pettenkofer, in The Popular Science Monthly for June.*

:O:

Case of Membranous Croup—New Method of Treatment— Recovery.

By ALEXANDER FULTON, M. D., of Conshohocken, Pa.

On the evening of the 22d of last month I was called in great haste to see a child of W. L. Found complaint membranous croup, of which the child was apparently dying; skin cold and clammy; pulse rapid and thready; face pallid; eyes sunken, half open and fixed, and the breathing very difficult, with that crowing noise so peculiar to the affection; suffocation seemingly imminent.

Having had a number of cases of this terrible disease, all of which proved fatal, notwithstanding careful treatment according to our text books, I determined putting into effect a new procedure, which I had contemplated doing in the very next case that presented itself, viz: I introduced my little finger into the child's mouth, over the tongue, until the epiglottis was reached, then pushed it into the larynx, as I supposed, and still forward, whether between or beyond the vocal cords I do not know. Directly, the child took violent fits of spasmodic coughing, followed immediately by the elimination of large mouthfuls of membranous exudation—very ropy—could be drawn like the white of an egg. The result was, the child on the very threshold of death, became animated; the complexion almost natural; the eyes, that were half opened and fixed, opened; and the breathing became less difficult. Relief was experienced until the next morning, when another paroxysm threatened. Again, I went through the same procedure, followed by the same good result, and prescribed the following,

as recommended by Dr. Thomas Drysdale in a former issue of the *Reporter*:—

R.	Pulv. potassæ chlor.,	3ij
	Syrup limon,	f. 3j
	Aquæ,	f. 3iij. M.

Sig.—A teaspoonful every hour.

Convalescence ensued, with complete recovery.—*Medical and Surgical Reporter*.

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[By A. B. CROSBY, M. D., New York.]

A LOST ART IN SURGERY.—But if this lost art of cleanliness is to be restored, how is it to be accomplished? The moral accountability for the disastrous results likely to follow the want of cleanly precautions in wards, seems to me to rest on the surgeon himself. It is for him, reverently realizing the functions of his high office, to point out the way. To accomplish the desired end, the exact duties in this regard, of surgeons, internes and nurses should be definitely enjoined. The surgeon should then hold his interne to a rigid daily accountability, and he in turn should narrowly watch the nurses. All causes for complaint of neglected duties to be instantly reported to the surgeon, and if not within his province to correct, to be reported by him to the hospital authorities. These details have seemed to me so absolutely essential, that I think they should be printed on cards which should be nailed on every door in the wards, and a copy furnished to every attendant connected with the ward for his instruction and guidance. As, however, the sum of these regulations has been expressed, I shall not weary the Society with them, simply adding that I have divided them into four sections.

First.—Regulations to be observed by all persons in common having any official connection with the ward.

Second.—Regulations for the guidance of internes.

Third.—Regulations for the guidance of nurses.

Fourth.—Regulations with reference to general cleanliness, designed for the head of the hospital.

And so finally we have reaffirmed the adage that "cleanliness is next to Godliness," and this, too, in the largest and best sense is health.—*Archives of Clinical Surgery*.

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Disinfecting Oven in Mercy Hospital.

By E. ANDREWS, M. D., Hospital Surgeon.

The disinfection of mattresses and pillows in hospitals has been very much neglected. Floors can be scoured, and sheets can be

washed, but what can be done with a mattress? Many hospitals have solved the problem by doing nothing. Mattresses which have been occupied by cases of erysipelas, pyæmia, or puerperal fever, were simply laid away to be aired, and then brought into use again, full of deadly forminities for fresh patients—I was about to say victims. By a singular obtuseness, surgeons who found their wards decimated by pyæmia and erysipelas, forgot their poisoned beds, and gravely asserted that the very stones and bricks of the building were poisoned, and that nothing would do but to erect a new hospital every five years.

Callender, of St. Bartholomew's Hospital, has overthrown this delusion by showing that an old hospital may be managed so as to be safer than an average private house, and that septic influences may be expelled from the building.

But to return to the mattresses. In Mercy Hospital my custom was to place surgical patients on straw mattresses. When a bed was vacated by the recovery or death of the patient, the straw was taken out and burned and the tick sent to the laundry to be washed. It was then filled with new straw, and laid away ready for use. The pillows were ripped open and the feathers renovated by boiling hot steam, and the pillow ticks washed. By these, and other precautions, disinfection was well accomplished, and pyæmia was almost unknown in the institution. However, the steaming of feathers, the emptying, washing and filling of ticks, and the burning of straw are troublesome to the attendants, and apt to be neglected, unless careful watchfulness is kept up by the surgeon. To render the disinfection more easy, I have since adopted the plan pursued with so much success in St. Bartholomew's Hospital, London, viz: the baking of every bed and pillow which has been used by a surgical patient. Dry heat destroys formites just as effectually as boiling water, and is far more convenient. To accomplish this the hospital has constructed a simple steam oven on the following plan:

A platform or stratum of parallel steam pipes is made, a little larger than the dimensions of a mattress, constituting the foundation. Eighteen inches above this another stratum of pipes is laid, parallel to the first. On the top of the under stratum a floor is laid of galvanized iron, and the whole apparatus enclosed so as to confine the hot air, and convert the space between the strata of steam pipes into a sort of oven. The enclosure has a door the whole length of one side which lets down for the insertion of the articles to be disinfected, and the pipes are connected with the steam boilers which heat the building. When in use the door is opened, the mattress and pillows are shoved in, the door closed, and the steam, which has a temperature of about 250° Fahrenheit, is let into the pipes. This makes a strong baking heat, and effectually disinfects the beds.—*Chicago Med. Journal.*

HEALTH OF CITIES.—The public health of the foregoing cities was not in such a satisfactory condition during March as it was in February, if we may judge by the death-rates; the inclement weather of March was probably one important factor in producing an increased mortality.

In New York, the deaths were mostly caused by phthisis, pneumonia, and bronchitis; diptheria and croup were more fatal than in February; scarlatina has steadily diminished since January.

In Philadelphia, the chief causes of death were phthisis, pneumonia, bronchitis, diptheria, small-pox, croup, typhoid fever, scarlatina,—all of them more fatal than in February.

In Brooklyn, the mortality from the seven chief zymotic diseases, was nearly the same as in February. Diptheria and croup have increased considerably. Scarlatina is less. The relative order of prevalent diseases is as follows: phthisis, diptheria (and croup), pneumonia, scarlatina, bronchitis.

In Chicago, scarlatina heads the list but is declining.

In Boston, scarlatina remains very near the low place in the list which it reached in February.

In Providence, the death-rate for the month was only 16.3 per 1000 of Population. The mortality was chiefly from diseases of the respiratory system. Diptheria was also more fatal than in February.

In Massachusetts cities other than Boston, phthisis, diptheria (and croup), and pneumonia were the chief causes of death. Scarlatina has subsided.—*Boston Med. Journal*.

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SAFE AND RAPID CURE FOR ANEURISM.—(*Brit. Med. Journal*, Feb. 3, 1877).—Dr. Horace Dobell, submits to surgeons a simple suggestion for the cure of aneurism. It is to stop the circulation above and below the tumor, remove the fluid contents of the latter by aspiration, and replace them by an injection of spermaceti or stearin. The latter are insoluble in blood, but solid at its temperature; fluid at a temperature low enough to allow of their being safely brought into contact with living tissues, and changes from liquid to solid with great rapidity; and are at the same time light, innocuous and unirritating. Their rapid solidification removes any danger of active or passive clots being washed away when the blood is allowed again to flow, while the time for the operation would be so short, that no harm would result to the other tissues on account of the arrested circulation.—*Detroit Med. Journal*.

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THE PRODUCTION OF ALBUMINURIA.—In an article in the *Transactions* of the Medical Society of King's county, N. Y., Dr. W. H. Martin observes that the diseases which are now known to be attended by albuminuria are so numerous and pathologically so

distinct, that we are puzzled in the endeavor to make analogy and comparison useful in testing the causative influence of pregnancy. It is hard to believe, for instance, that the conditions under which albuminuria is produced by valvular disease of the heart on one hand, and by diphtheria on the other, are identical, or even similar. That scarlatinal poison and that pregnancy both cause albuminuria is proved; but that both cause it by originating exactly the same kind of disturbance eludes demonstration. It is rather a "begging of the question" to assert that each produces changes in the blood, and that it is useless to seek beyond these wholly indeterminable changes for a mode of causation. It is easier to suppose that each disease or group of diseases (if they can be grouped etiologically or otherwise) has a peculiar power, and exerts it in a peculiar way, than it is to suppose the existence of some one essential condition to which all equally give rise; that is, one single and immediate cause of albuminuria.—*Med. and Surg. Reporter.*

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Editorial.

Volume XVI.

Volume sixteen is completed by this July number. It is short three numbers, which are deducted in making the price of the volume. Complaint has been made from all quarters, that the Journal has not reached subscribers regularly. We cannot now correct the past, only by deducting the cost of these lost or mis-carried numbers from the price of the volumes. It is therefore very desirable that subscribers *reply* to the invitation sent them with their bills; as we now desire to know how our accounts should really stand. It will be the aim of the Journal in future, to be prompt and regular, and to represent the progress of medicine and surgery as truly and fully as possible. Old subscribers and correspondents are cordially invited to contribute to our pages, and not forget us in our efforts to publish the experience and observation of the profession. Index for volume XVI will be found in this number.

Many thanks are due our patrons for their indulgence, and many hopes are entertained for the future of our journal. It is the oldest monthly medical periodical in the state; has a history and hereditary descent to be proud of, and with the favor of the profession, is sure to continue a medium of communication which will be valuable to those interested; but who knows the future. Let us *hope and trust.*

:O:

American Medical Association.

The recent meeting of the American Medical association, we understand, was of unusual interest—distinguished for concert of feeling and action. We

shall be able to furnish complete report in our next number ; meanwhile we take great pleasure in announcing that Buffalo is appointed as the place of meeting for the American Medical Association in 1878, by invitation of physicians of Buffalo, and of Erie County.

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Women's Hospital.

OUT IN CIRCULARS,—IF IN BUFFALO, MIGHT BE CALLED "ADVANCED SHEETS."

Drs. Peaslee, Emmett and Thomas publish the particulars of the separation of Dr. J. Marion Sims from the Woman's Hospital, New York. Dr. Sims makes reply to their printed circular, defending his own action and censuring his colleagues for withholding from him support, and the governors for unjustifiable interference in the number of spectators of operations to be admitted upon invitation of surgeons of the hospital, limiting the number to fifteen. He says to the governors as we think truly: "If it is right to admit 15, it is just as right to admit 17, 18 or 20. You might safely have left this to the discrimination and better judgment of the surgeons.

If we do our duty to our patients ; if we treat them in a kind and considerate manner ; if we give them time and care necessary for their restoration to health ; if we give them all advantage of treatment that you yourselves could command in your own homes, we have done our whole duty, and this should end your personal supervision over our actions.

But when you come to invade the sanctity of our operating room, and to dictate to us who shall be present and who shall not be present to witness operations, you evidently over-step the limits of your authority. And when you come to count the number of doctors we invite to witness operations, it seems to me, you are not confining yourselves to your own legitimate sphere." This part of Dr. Sims' speech is truthful and manly, and we admire its tone and spirit. Of the differences between the distinguished members of the staff of the Woman's Hospital, *of* the State of New York, or *in* the State of New York, we have nothing to say. We respect them all too highly to point out any mistakes they may have made. Physicians contribute too largely to hospitals and similar institutions, not to have their feelings respected. The whole hospital system rests in, and depends upon the gratuitous and charitable care of physicians, and the public should long since have learned that hospitals are the institutions of physicians, aided of course by governing boards of benevolent ladies and gentlemen. The medical profession contribute alone more for the care of the sick poor, than all others combined, and it is quite time an appreciating public should recognize and acknowledge this fact, otherwise the great day will dawn, when medical services in hospitals will command adequate pecuniary consideration, instead of doubtful and uncertain honor.

Dialysed Iron.

We would call the attention of physicians to this new pharmaceutical preparation. It has been long known to the experimental chemists, but until lately has not been manufactured in sufficient quantity to make it a commercial product. By the method employed by Wyeth & Bro, a dark brown liquid, having little styptic taste is made. This in connection with the fact that it does not blacken the teeth, nor disturb the alimentary canal, will recommend it above ordinary preparations of iron. It cannot, however, be given in composition with any other drug, as it is liable to precipitation, the addition of a few drops of undistilled water clouding the solution. In all cases where the use of iron is indicated this will be found to be the most agreeable mode of prescription. It is a pure hydrate and as efficient as the sesquioxide in all cases of poisoning, when the latter is useful, besides having the additional advantage of being always ready for use.

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May 1st, 1877.

The first Annual Meeting of the American Dermatological Association will be held at Niagara Falls on the fourth day of September next.

"The titles of all papers to be read at any annual session shall be forwarded to the secretary, not later than one month before the first day of the session."

Respectfully yours,

Officers	{	JAMES C. WHITE, M. D., PRESIDENT,	}	VICE-PRESIDENTS.
		LOUIS A. DUHRING, M. D.,		
		ROBT W. TAYLOR, M. D.,		
		L. DUNCAN BULKLEY, M. D., SECRETARY,		
		JAS. NEVINS HYDE, M. D., TREASURER.		

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The Popular Science Monthly.

No publication has done so much to educate the people in true scientific principles of thought, as this magazine. All scientific discoveries of any value have been noted and discussed by the greatest scientists in Europe and America, so that by its aid a man of ordinary education can keep well posted upon the scientific events of the day. Not satisfied with the noble work accomplished, they astonished the reading world by publishing in May, a new issue, "The Popular Science Monthly Supplement," a monthly complete in itself, and of such interest and merit that it will be likely to advance the esteem in which the parent magazine is already held. Three numbers have already been published.

We would call the attention of our readers to the June number, in which will be found an article by Dr. Max Von Pettenkofer, "Relation of air to the house we live in," which presents in a masterly way the principle of ventilation. We publish an extract from this, in our present number. Of equal interest in a medical point of view, is article III, July number, by the same author, on ground

air in its hygienic relations. But in such an array of literary thought we cannot particularize, and can only say, subscribe and investigate its rich fields for yourselves.

—:O.—

Books Reviewed.

Myelitis of the Anterior Horns, or Spinal Paralysis of the Adult and Child. By E. C. SEGUIN, M. D., Clinical Professor of Diseases of the Mind and Nervous System, in the College of Physicians and Surgeons, New York: G. P. Putnam's Sons, 182 Fifth Avenue, 1877.

This volume is elegant in appearance, clear and forcible in expression, and an important addition to the literature of the subject of which it treats. Forty-five clinical cases have been gathered from the practice of some of the leading physicians of this and other countries. After giving their history in detail, the author presents the symptoms analytically and synthetically studied.

A neatly arranged table of autopsies of twenty-nine cases of infantile spinal paralysis is an interesting feature of the book. Diagnosis, Aetiology Treatment and Prognosis, each forms the subject of a brief chapter. Exposure to cold and dampness, and acute contagious diseases are given as chief among the known causes of "Myelitis of the anterior horns." The pathological anatomy of the disease has been rigidly investigated, and prognosis and treatment as given by the author, are rational sequences of this antecedent.

Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the United States for the fiscal year 1875. By JOHN M. WOODWORTH, M. D.

The usual very carefully prepared records and statistics are given with several contributed articles upon yellow fever, consumption, scurvy, the seton in paralysis and epelipsy, also one very well prepared upon syphilis and chancroid.

The Practitioner's Hand-Book of Treatment; Or the Principles of Therapeutics. By J. MILNER FOTHERGILL, M. D., Member of the Royal College of Physicians of London; Assistant Physician to the City of London Hospital for diseases of the Chest, Victoria Park, etc. Philadelphia: H. C. Lea. 8vo. pp. 575.

The author of this work shows that he is thoroughly familiar with the current literature of the profession in matters of physiology, pathology and therapeutics. The names of very many authorities are presented in connection with their

views on subjects they have specially investigated. He has carefully observed the varying causation and conditions of disease, and advocates the peculiar treatment indicated therein. The book is interesting, to every careful practitioner for the excellent manner and condensed form in which nearly all the recent views and facts in therapeutics are presented. One can here review in a brief time interesting facts which can be gathered only by extensive reading. It does not appear that the author relies upon his personal experience in the methods of treatment quite so much as would be expected. His statements are mainly such as are upheld by the general experience of physicians; in doubtful and changing methods of treatment, he presents facts of the physiological action of remedies advocated, and appeals to the profession for recognition of their value. He is discreet in the size of his doses, very intelligent in his selection, not so careful as to the palatability of his formula. The reader is very pleasantly, and frequently reminded of how near the author's views coincide with his own, and very many useful ideas he will find called to his attention here for the first time.

We think he does not rightly interpret the sentiment of the best authors and practitioners of the United States to-day, upon the matter of depressants in the acute febrile stages of disease, when he quotes Ringer;—"Aconite is to be most esteemed for its power, little less than marvelous, of controlling inflammation, and subduing the accompanying fever. It will sometimes at once cut short an inflammation. It will not remove the products of inflammation, but by controlling the inflammation, it prevents their formation so saving the tissues from further injury."

As examples in which antimony is to be given, he cites whitlow and tonsillitis, also pleuritis from tubercle; his dose however, is far below that which was in common vogue twenty years ago. The remedy has been nearly abolished of late. It is valuable to compare present editions with former ones of our best authorities and notice which way progress is tending. The sensible views which were advocated in Flint's Practice years since, have of late been almost unqualifiedly adopted by our able writers on children's diseases, and it would take very positive experimental evidence to contract this tendency here.

In reference to the value of digitalis, the following is quoted from his chapter on the circulatory system. "In no class of diseases has there been so much improvement wrought in treatment by physiological research as in the diseases of the heart." "The correct understanding of the action of digitalis, of the class of cases to which it is suited, and those where its use is contraindicated from a subject upon which every practitioner and every student ought to have definite and distinct ideas; that is, if he wish to hold his own in the present arduous struggle for existence." W.

Contributions to Reparative Surgery. By GURDON BUCK, M. D.
New York: D. Appleton & Co.

The decease of the author in March last followed not long after the publish-

ing of this volume. He was appointed attending surgeon to the New York Hospital in 1837, and held this position until his death. Eminent in his personal character and ability, he held numerous positions of honor and trust; he was widely known for the boldness and skill of his operations, and the painstaking care he gave his cases. He is universally known for his establishment of the method of weight and pulley extension in fractures of the thigh. In this work plastic surgery, a matter of his especial pride is treated of. Numerous cases accompanied by faithful illustrations are carefully detailed, and his success in contractions from burns, cheiloplasty and hare lip is a matter of much interest.

W.

A Course of Practical Histology. By EDWARD ALBERT SCHÆFER, Assistant Professor of Physiology in University College, London. With Illustrations. Philadelphia: Henry C. Lea. 1877. 12mo. pp. 304.

To acquire an understanding of the minute anatomical character of a membrane or part, and of the pathological processes which may affect it, is much like the blind learning to read, except one's eyes have the assistance of the microscope, and of printed illustration. With the help of recent works it is not difficult for an ordinary student to recognize with the microscope, the general histological character of tissues and organs, and to verify for himself to considerable extent, the statements of works on medicine or surgery. Histological anatomy, normal and morbid, is in no degree a matter of conjecture, but can be studied practically with advantage, to a certain extent by every earnest student of medicine.

This small volume is an excellent and complete manual for the preparation of microscopic specimens of the various tissues and organs of the body. It has the clearness, simplicity and faithfulness of an experimental investigator, and is on this account attractive and interesting to general students. It is to be used in connection with such descriptive and illustrated works as Frey's Histology and Histo-Chemistry, Stricker's Manual of Histology, and others. The discoid colonies of the blood shown by Osler, are described; preparations in glycerine are made and recommended more frequently than other authors have done; and the methods for bringing out different elements of a tissue or organ are fully presented.

W.

A Directory for the Dissections of the Human Body. By JOHN CLELAND, M. D., F. R. S., Professor of Anatomy and Physiology in Queen's College, Galway. Philadelphia: Henry C. Lea. 1877. Buffalo, T. H. Butler.

For practical use in the dissecting room, this small and unpretending work will be found to be of vastly more importance than many of the works which

